APPROVED BY DRAFTSMAN
C. S. FIG.
CLASS SUBCLASS

Title: TIME-BASED MODELING
Inventor: Jonathan M. FRIEDMAN and Flynn D. FRIEDMAN
Application No.: 09/182,101
Docket No.: 410862000100

6360188

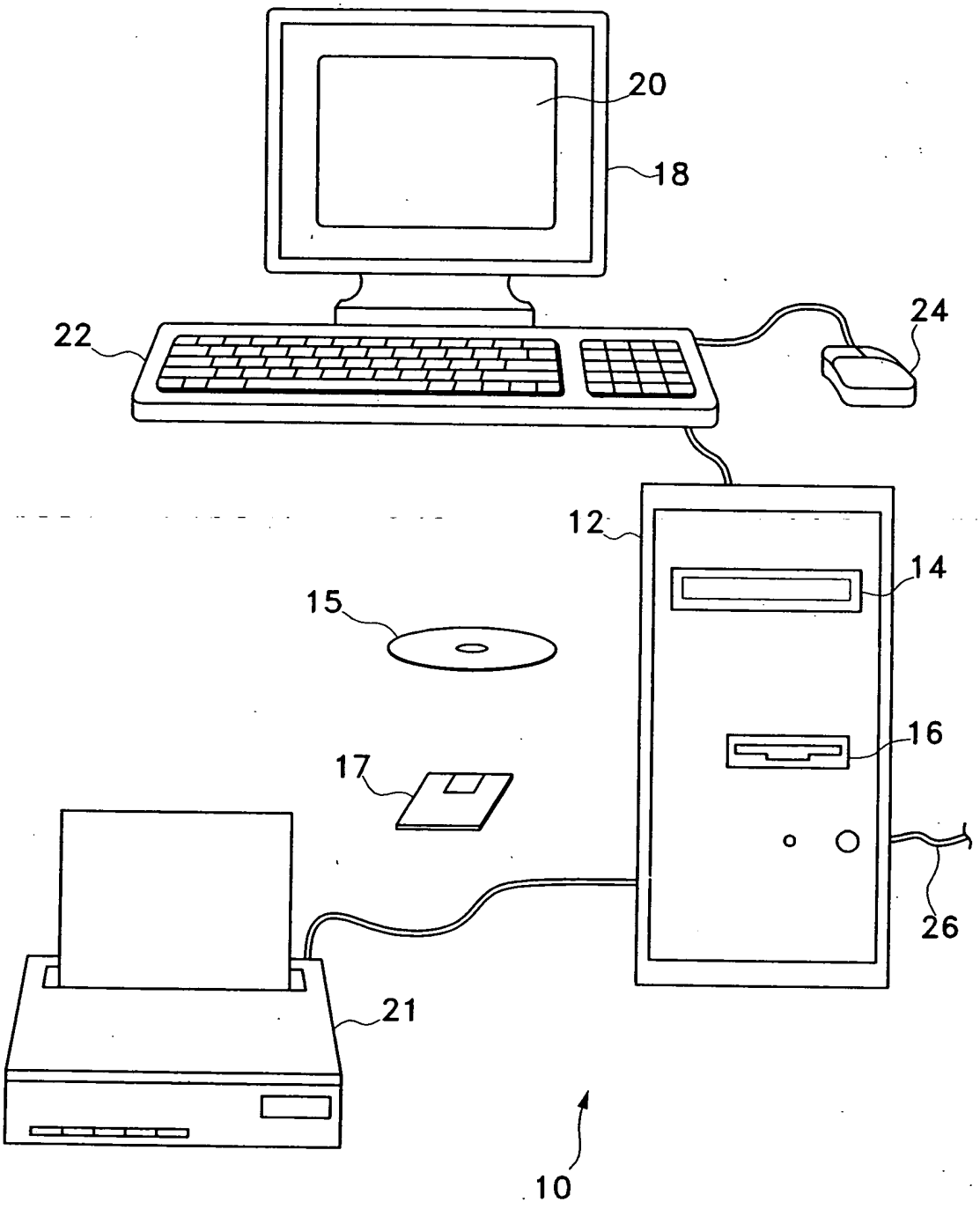
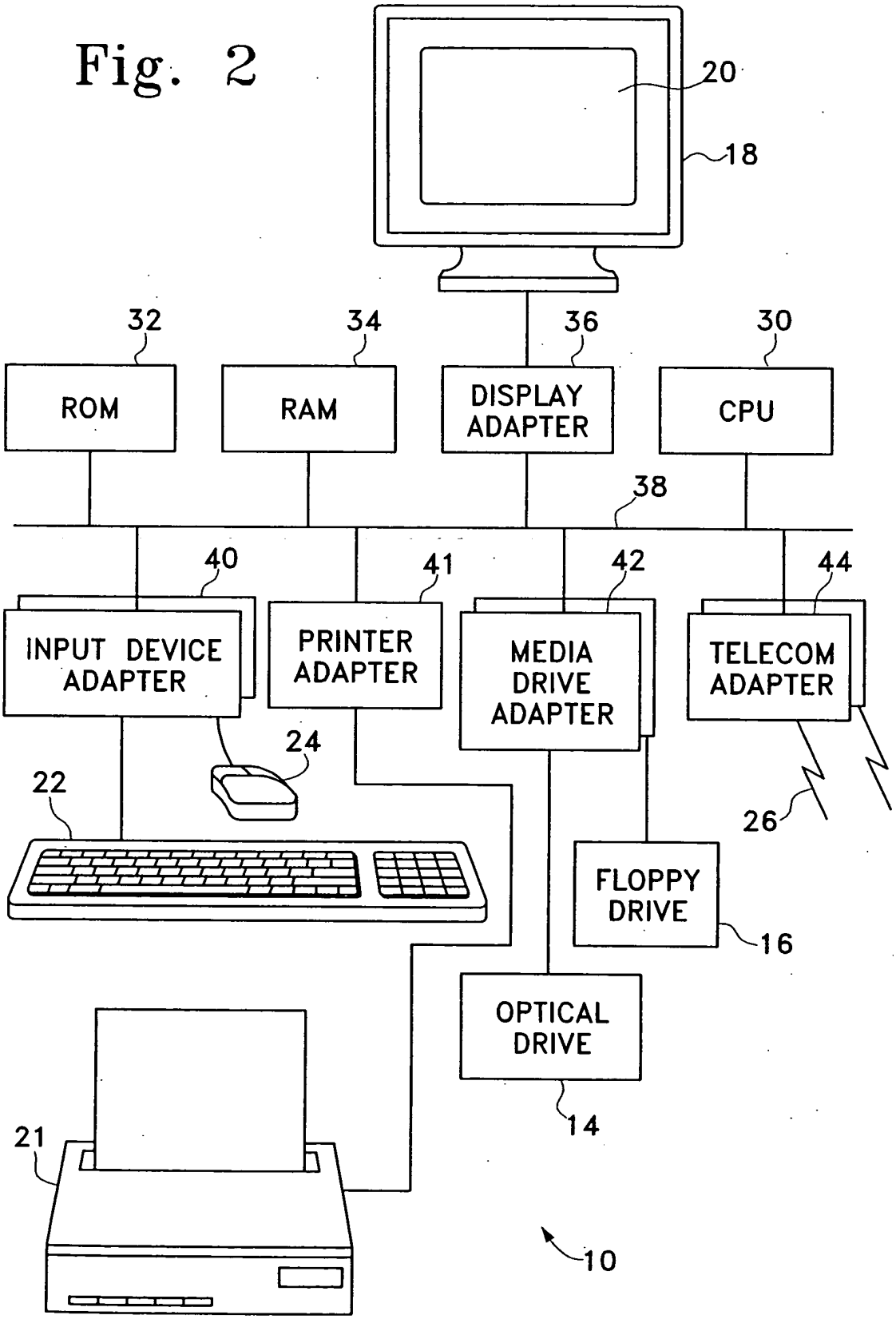


Fig. 1

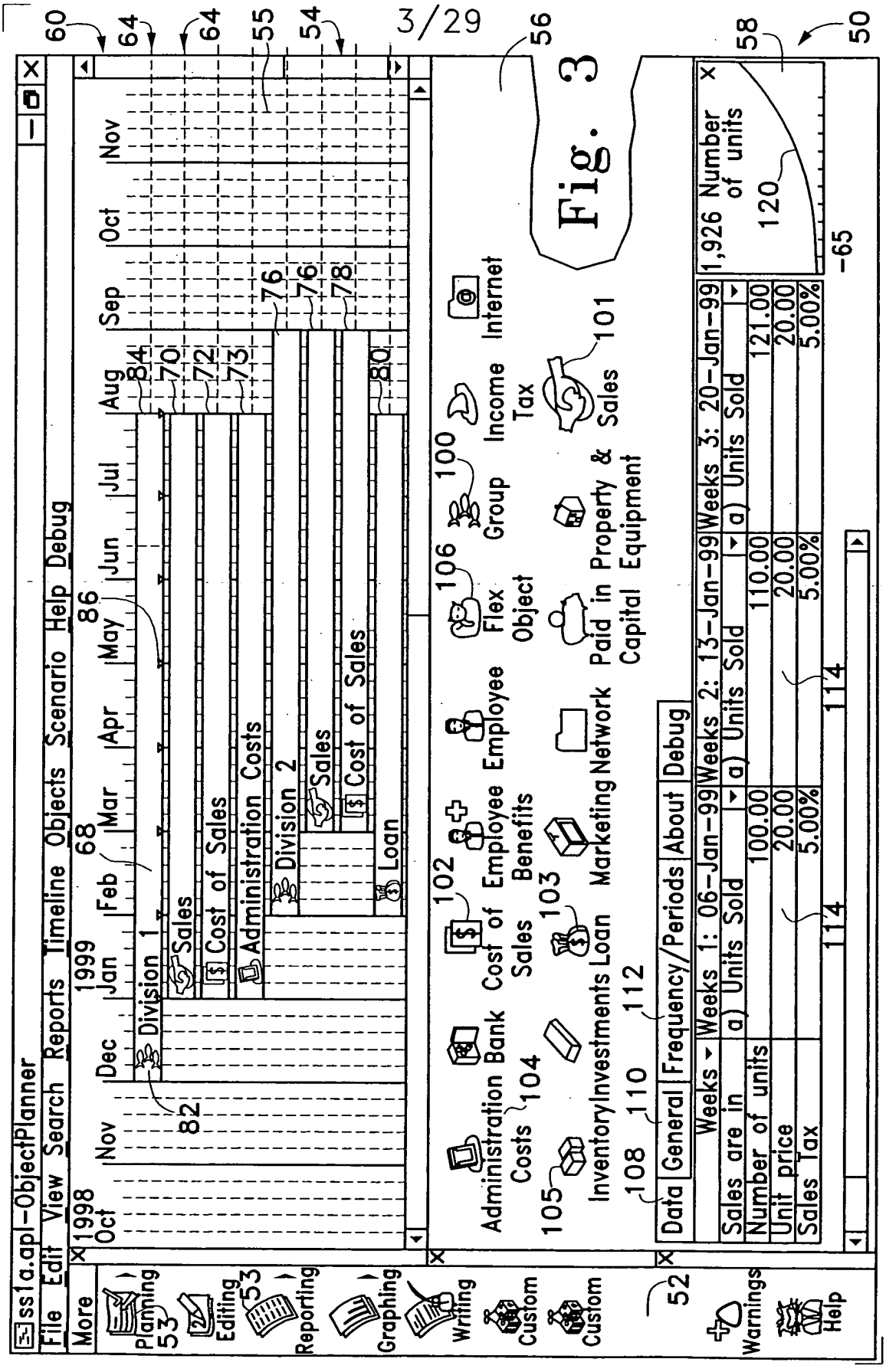
APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

Fig. 2



APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

Title: TIME-BASED MODELING
Inventor: Jonathan M. FRIEDMAN and Flynn D. [illegible]HMAN
Application No.: 09/182,101
Docket No.: 410862000100



APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

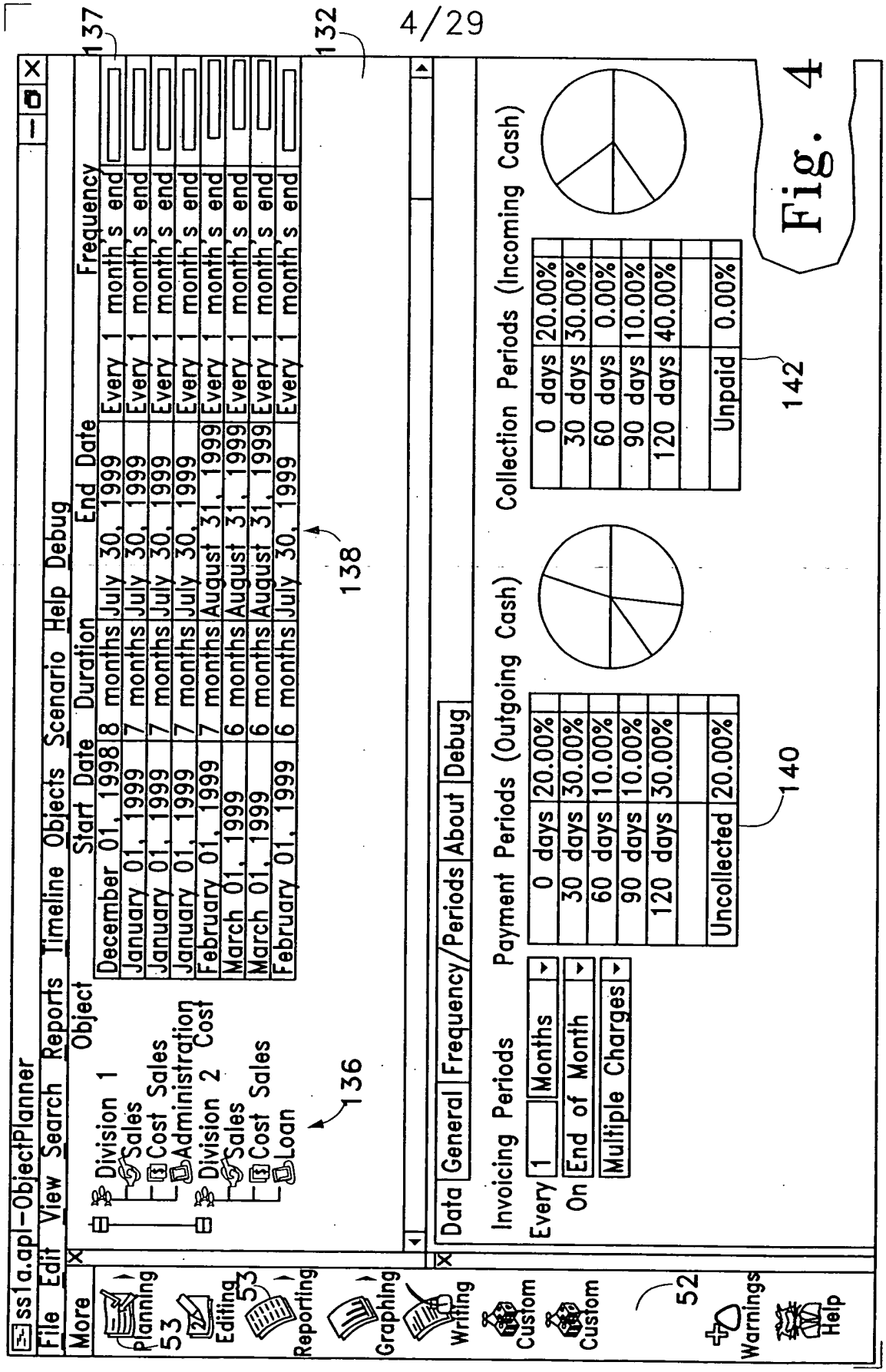
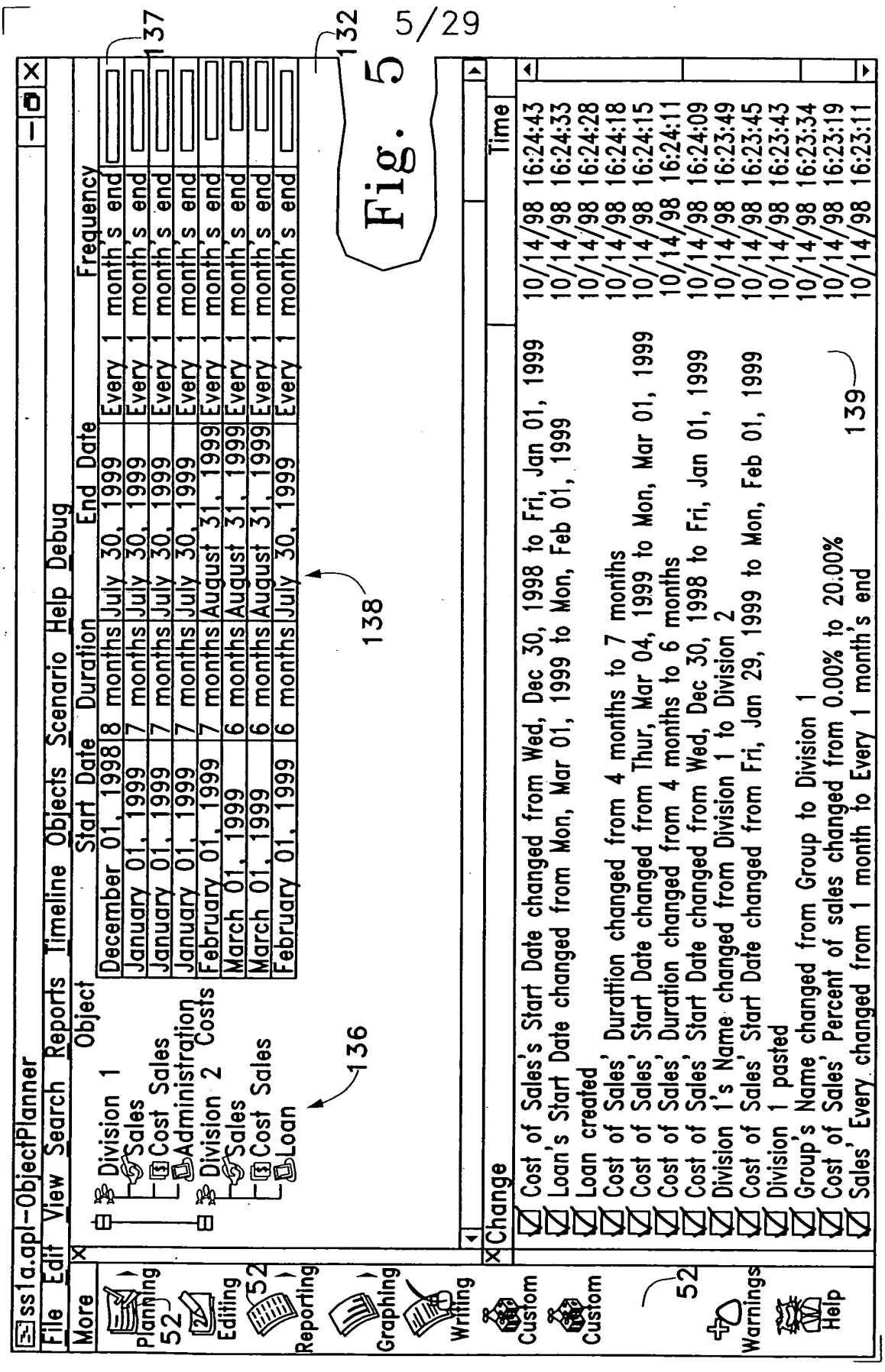


Fig. 4

PPROVED | O.G. FIG.
BY | CLASS | SUBCLASS
RAFTSMAN

Title: TIME-BASED MODELING
Inventor: Jonathan M. FRIEDMAN and Flynn D. FISHMAN
Application No.: 09/182,101
Docket No.: 410862000100

Fig. 5



APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

Title: TIME-BASED MODELING
Inventor: Jonathan M. FRIEDMAN and Flynn D. ...SHMAN
Application No.: 09/182,101
Docket No.: 410862000100

Fig. 6

ss1a.apl–ObjectPlanner

File Edit View Search Reports Timeline Objects Scenario Help Debug

More

Planning 53 | Editing 53 | Reporting | Graphing | Writing | Custom | Custom | 52 | Warnings | Help

My Business
INCOME FORECAST
FOR THE PERIOD ENDED Friday, September 29, 2000

	29-Jan-99	26-Feb-99	31-Mar-99	30-Apr-99	31-May-99	30-Jun-99	30-Jul-99
	$	$	$	$	$	$	$
REVENUE							
Division 1 Sales Sales	300.00	270.00	243.00	218.70	196.83	177.15	159.43
Division 2 Sales Sales			673.49	1,037.50	1,449.95	2,223.97	3,581.72
TOTAL REVENUE	$300.00	$270.00	$916.49	$1,256.20	$1,646.78	$2,401.11	$3,741.15
COST OF GOODS AND SERVICES							
Cost of materials	60.00	54.00	183.30	251.24	329.36	480.22	748.23
Production payroll		2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
Direct costs							
TOTAL COST OF SALES	$60.00	$2,554.00	$2,683.30	$2,751.24	$2,829.36	$2,980.22	$3,248.23
GROSS PROFIT	$240.00	($2,284.00)	($1,766.81)	($1,495.04)	($1,182.57)	($579.11)	$492.92
TOTAL ADMINISTRATION EXPENSES	$145.00	$145.00	$145.00	$145.00	$145.00	$145.00	$145.00
TOTAL OPERATING EXPENSES	$145.00	$145.00	$145.00	$145.00	$145.00	$145.00	$145.00
NET INCOME	$95.00	($2,429.00)	($1,911.81)	($1,640.04)	($1,327.57)	($724.11)	$347.92
CUMULATIVE NET INCOME	$95.00	($2,334.00)	($4,245.81)	($5,885.85)	($7,213.43)	($7,937.54)	($7,589.61)

150

APPROVED
BY
DRAFTSMAN

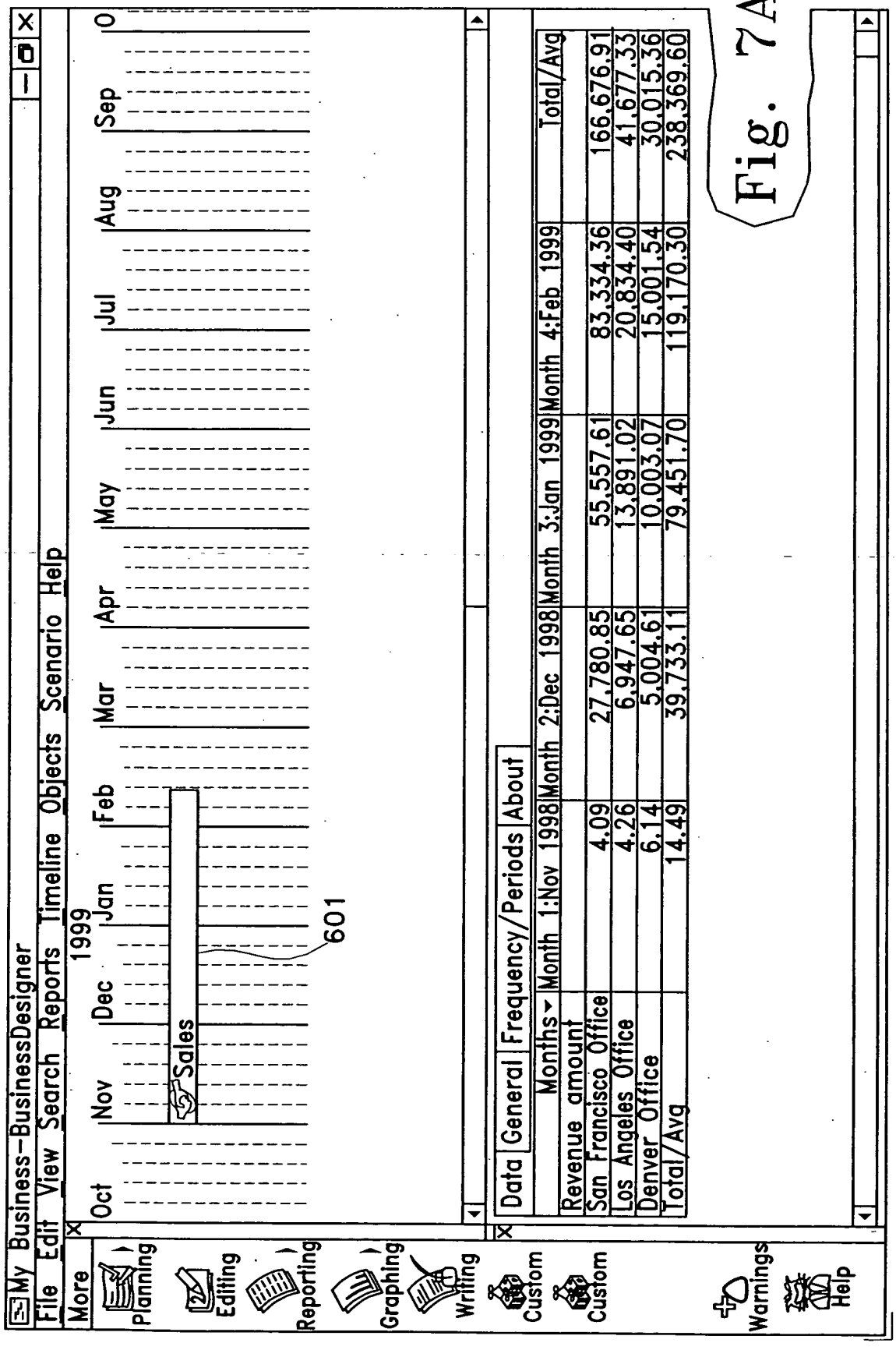


Fig. 7A

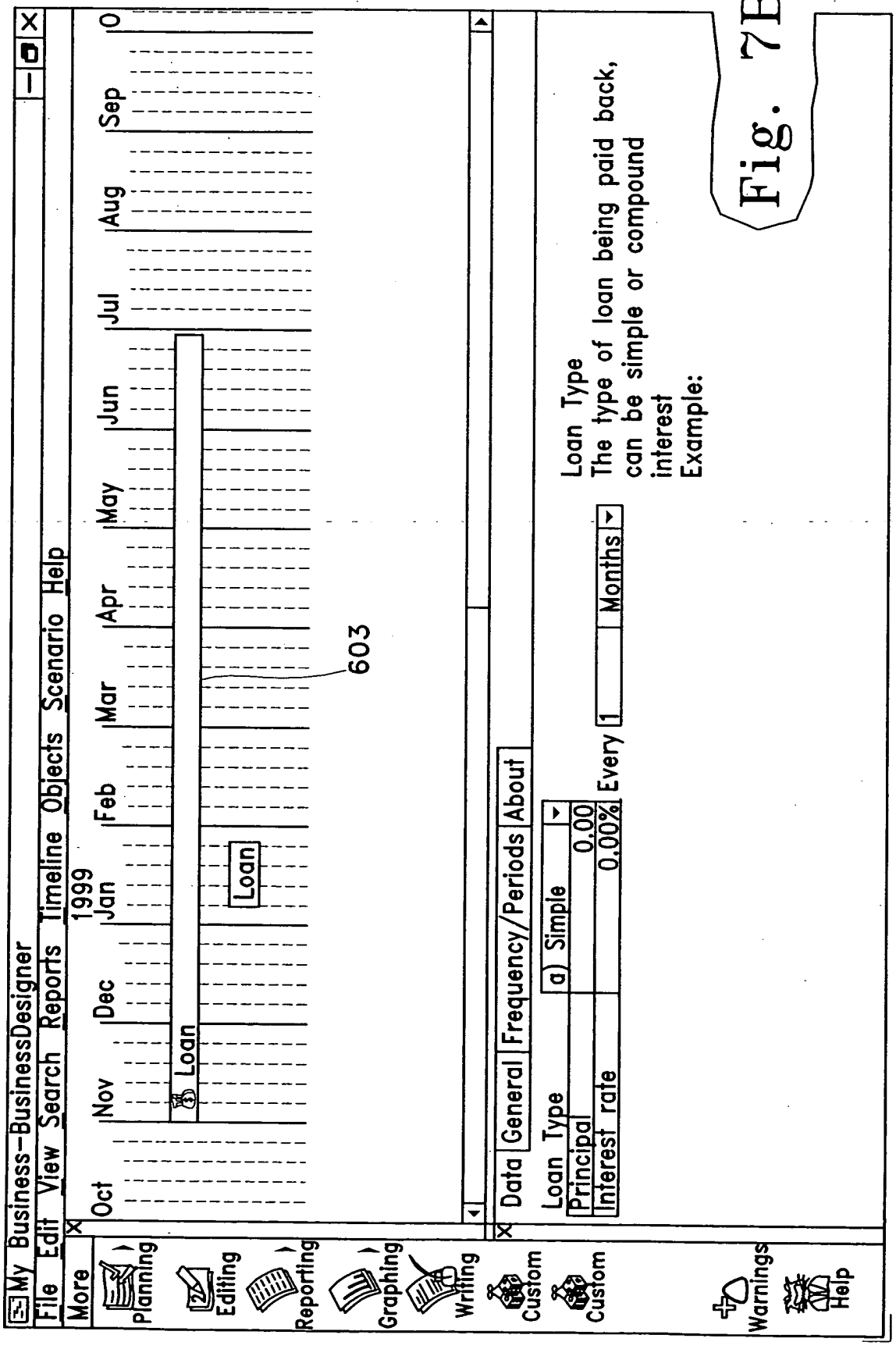
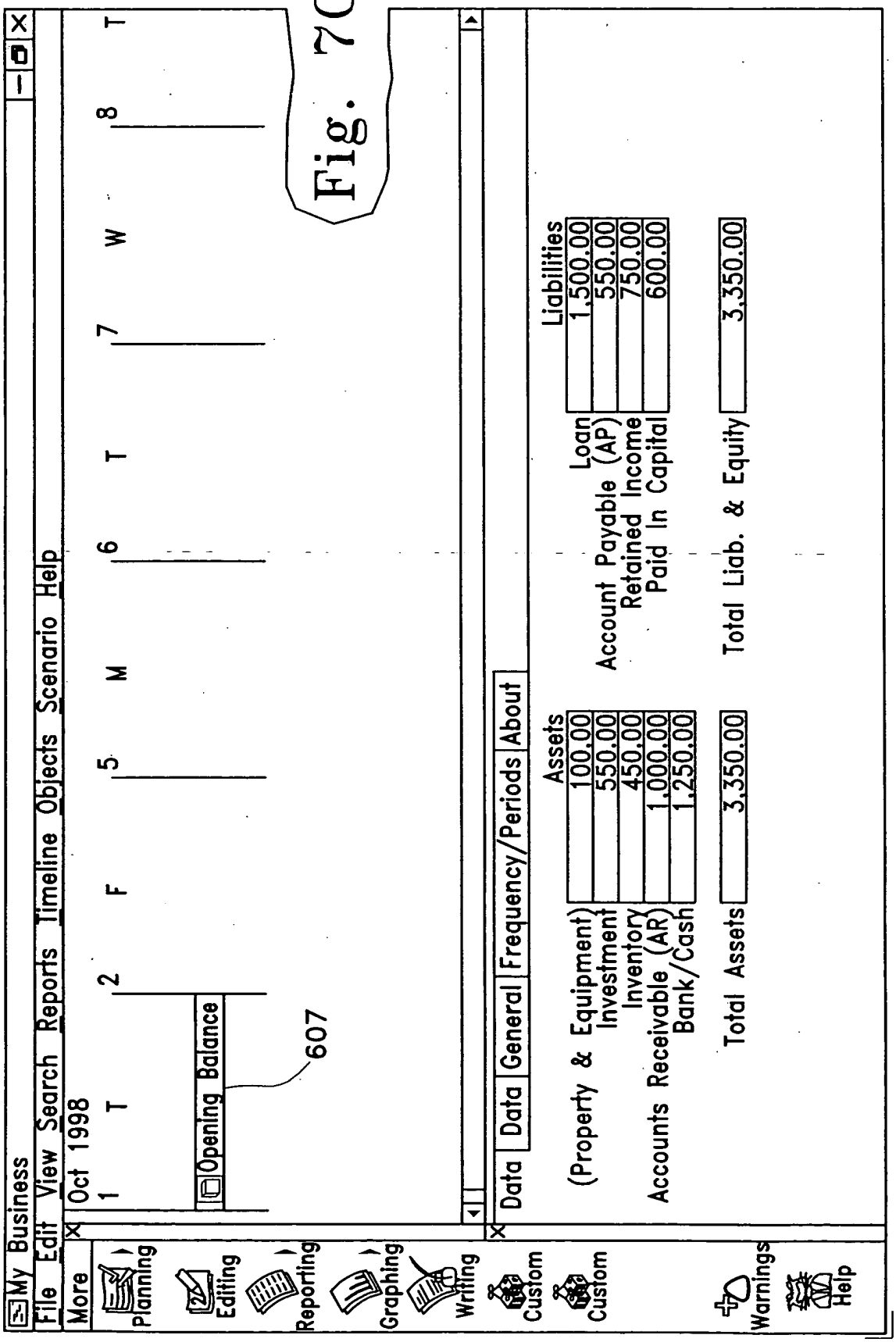

My Business-BusinessDesigner
File Edit View Search Reports Timeline Objects Scenario Help
More
Planning
Editing
Reporting
Graphing
Writing
Custom
Custom
Warnings
Help
1999
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
0
Loan
Loan
603
Data
General
Frequency/Periods
About
Loan Type
a) Simple
Principal
0.00
Interest rate
0.00%
Every
1
Months
Loan Type
The type of loan being paid back, can be simple or compound interest
Example:

Fig. 7B

PROVED BY AETSMAN | O.G. FIG. | CLASS | SUBCLASS

Title: TIME-BASED MODELING
Inventor: Jonathan M. FRIEDMAN and Flynn D. [illegible]IMAN
Application No.: 09/182,101
Docket No.: 410862000100

Fig. 7C



APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

Title: TIME-BASED MODELING
Inventor: Jonathan M. FRIEDMAN and Flynn D. LASHMAN
Application No.: 09/182,101
Docket No.: 410862000100

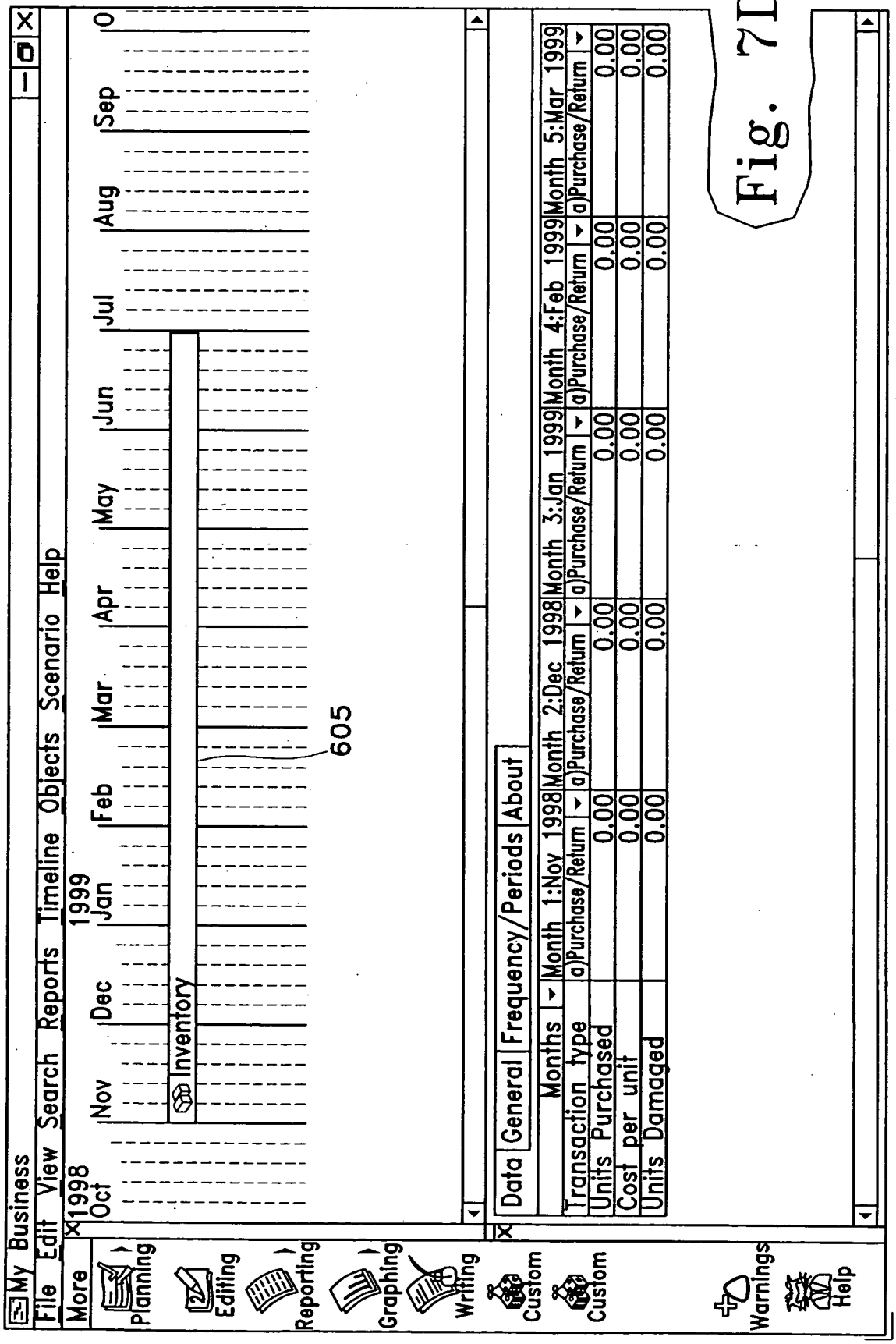


Fig. 7D

PROVED BY METSMAN | O.G. FIG. | CLASS | SUBCLASS

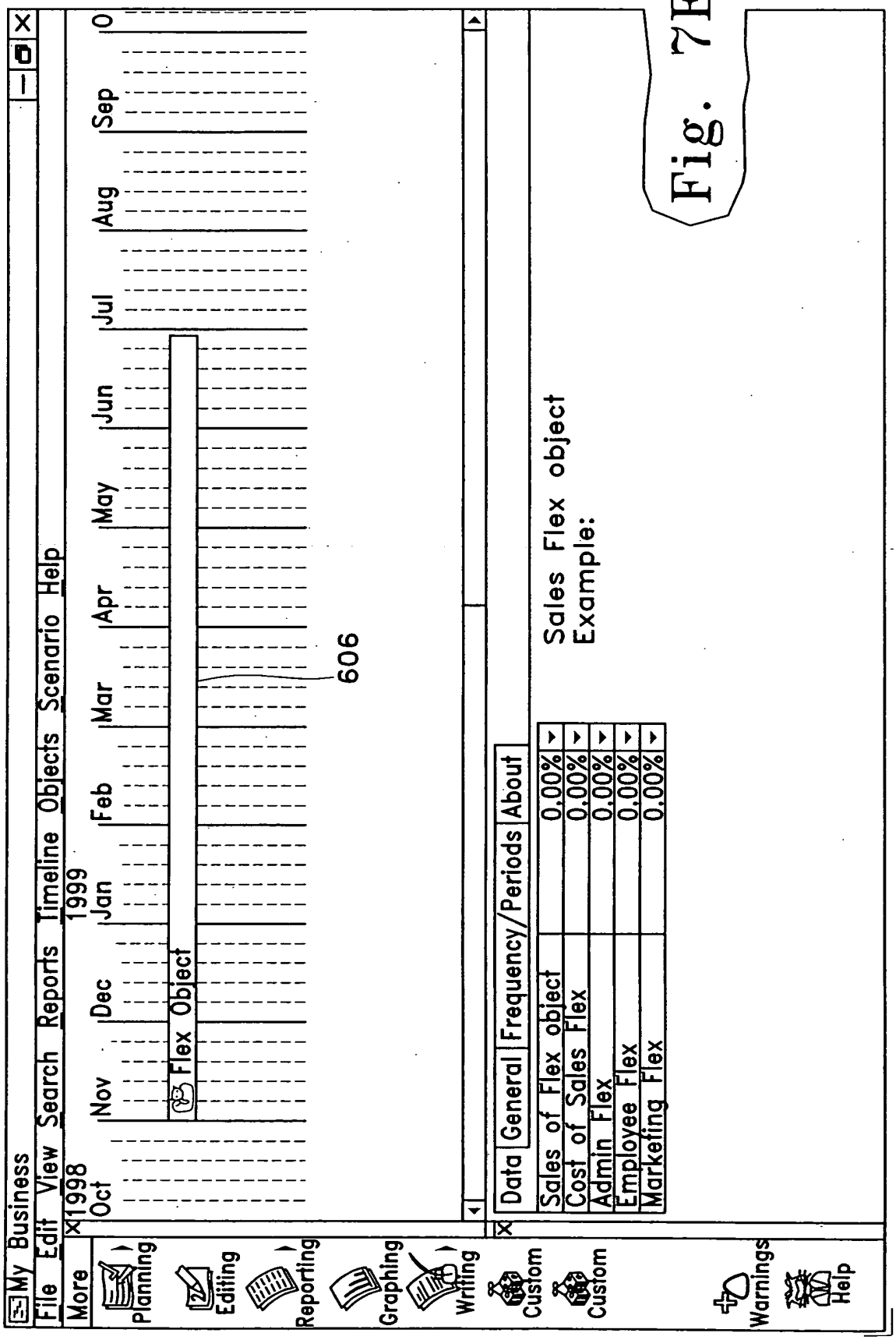


Fig. 7E

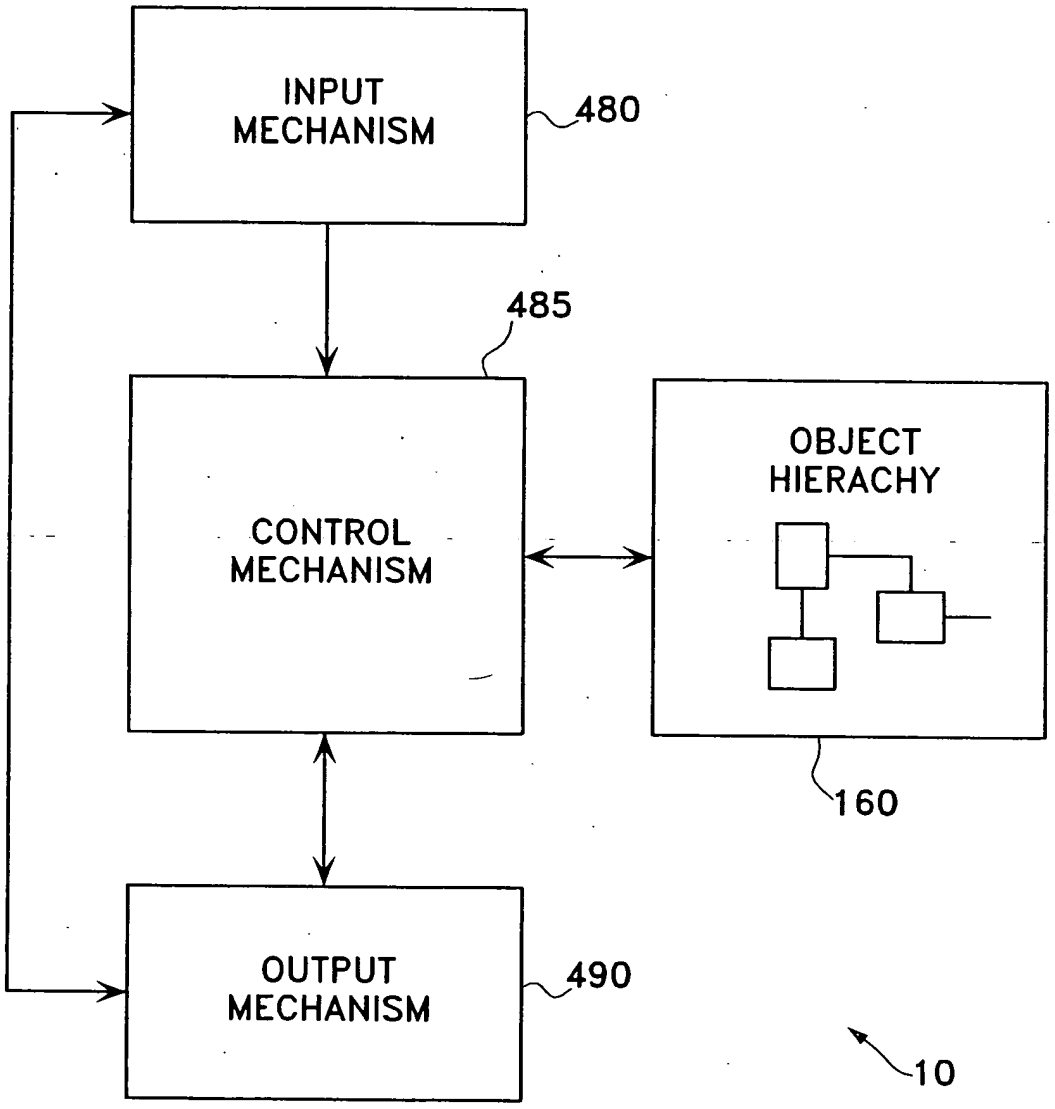

INPUT MECHANISM
480
485
CONTROL MECHANISM
OBJECT HIERACHY
160
OUTPUT MECHANISM
490
10

Fig. 8

APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

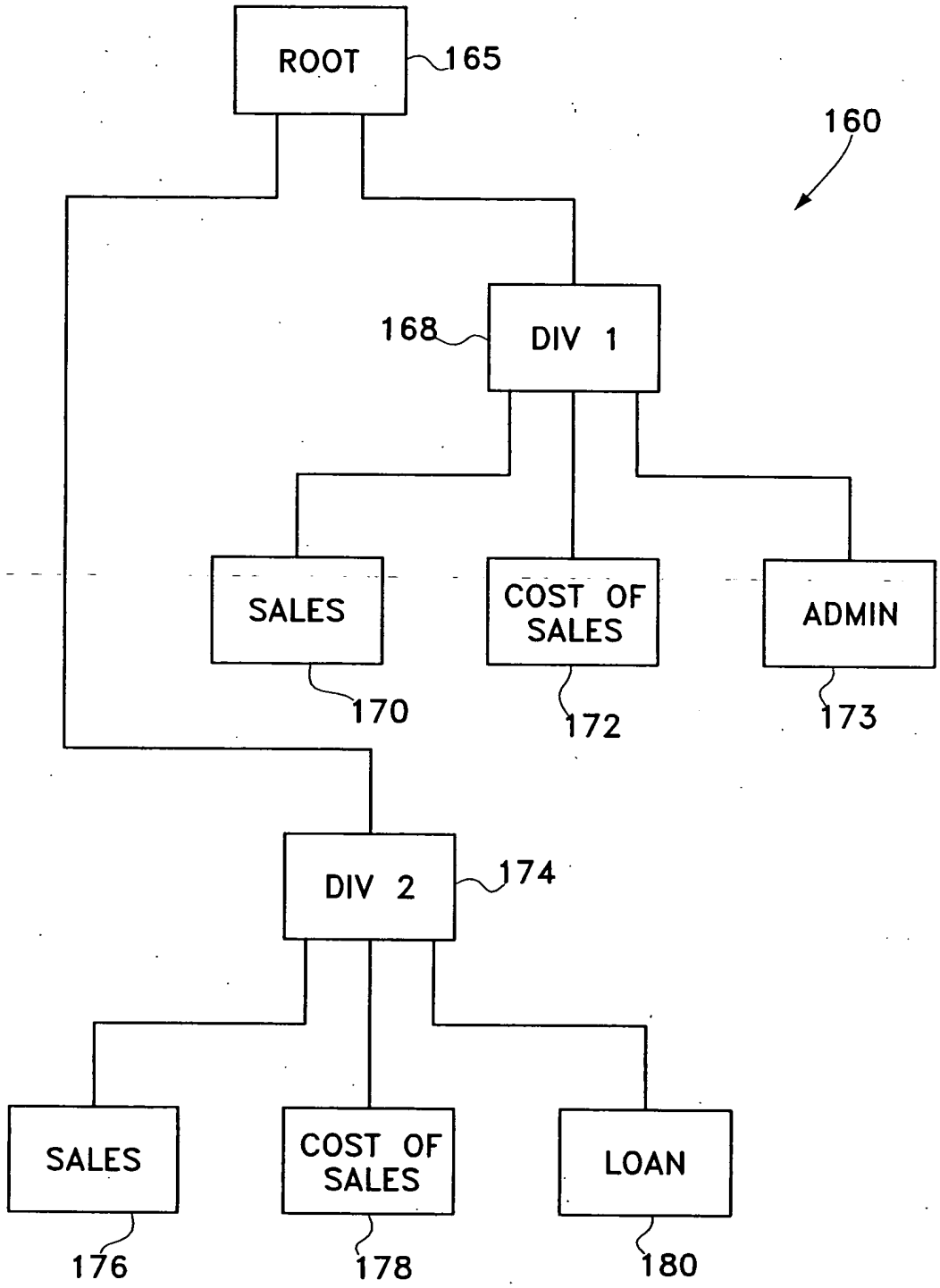


Fig. 9

Fig. 10

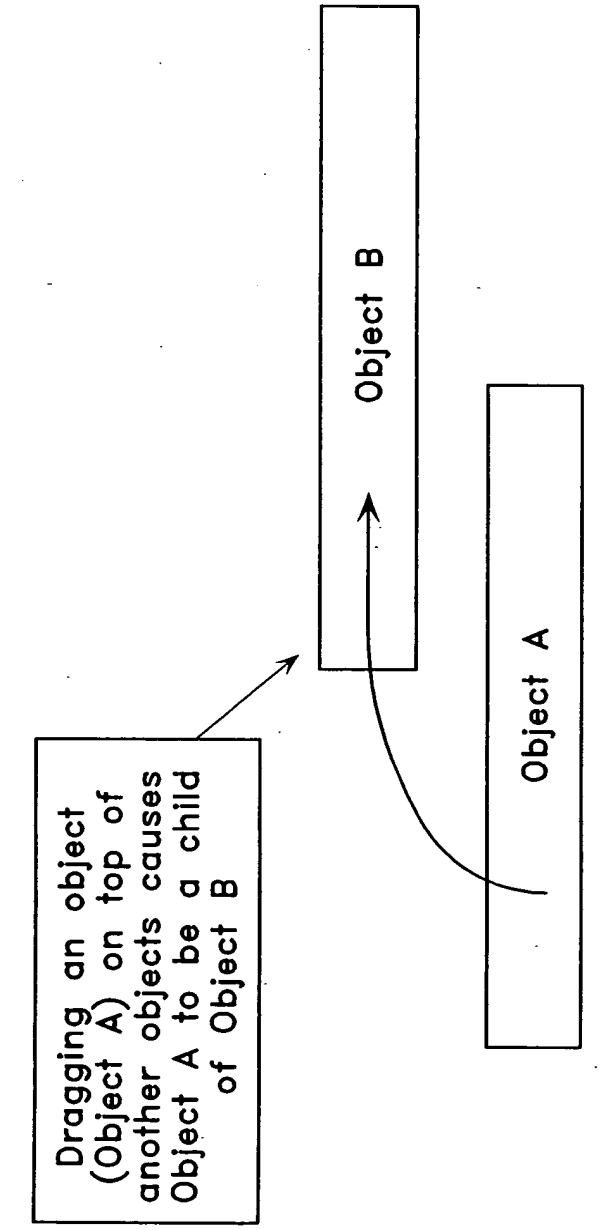
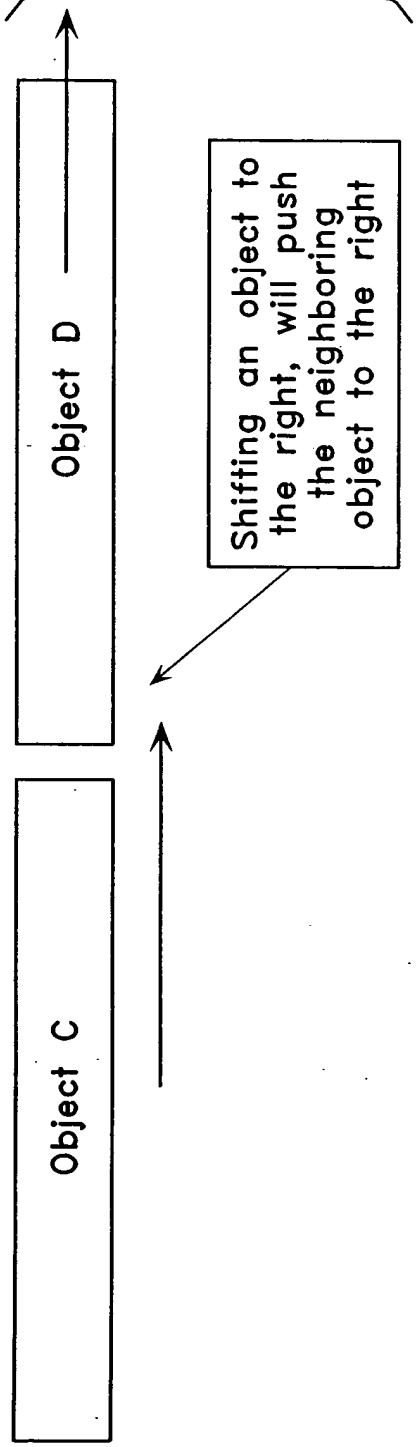

Object B
Object A
Dragging an object (Object A) on top of another objects causes Object A to be a child of Object B

Fig. 11


Object D
Object C
Shifting an object to the right, will push the neighboring object to the right

APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

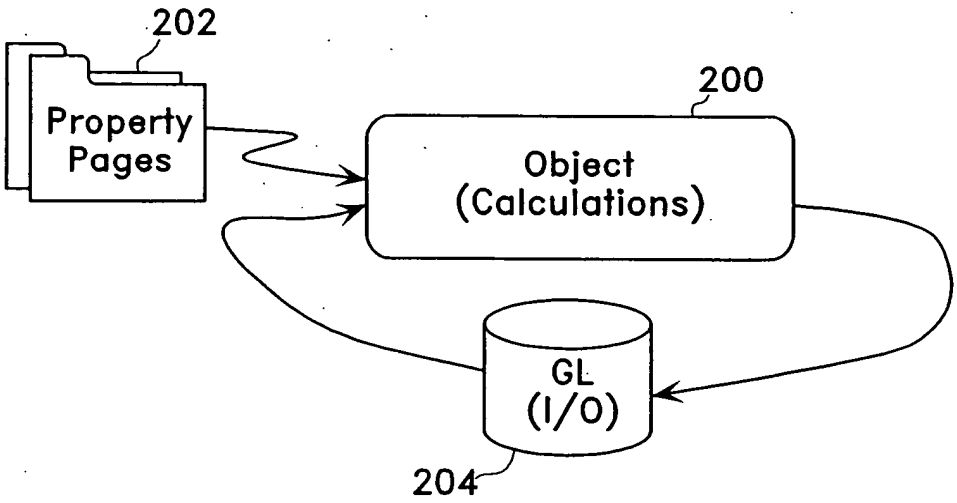


Fig. 12

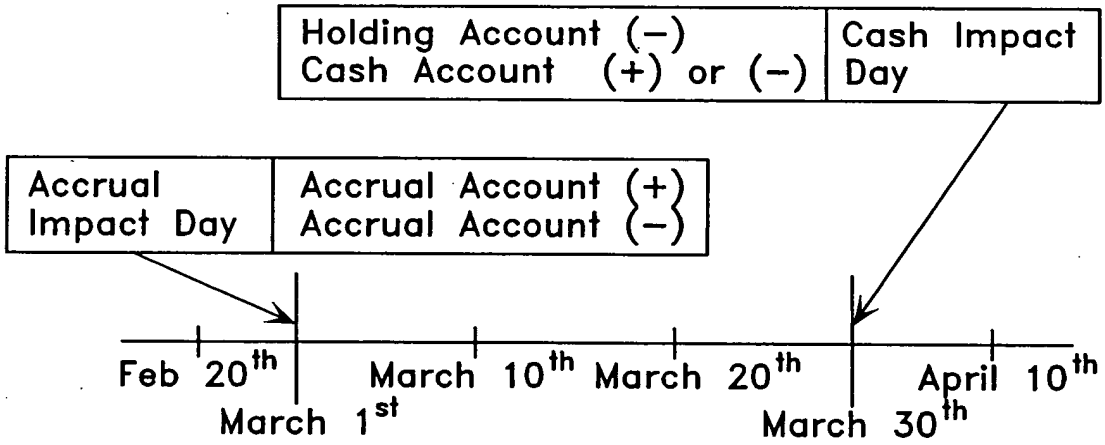


Fig. 13

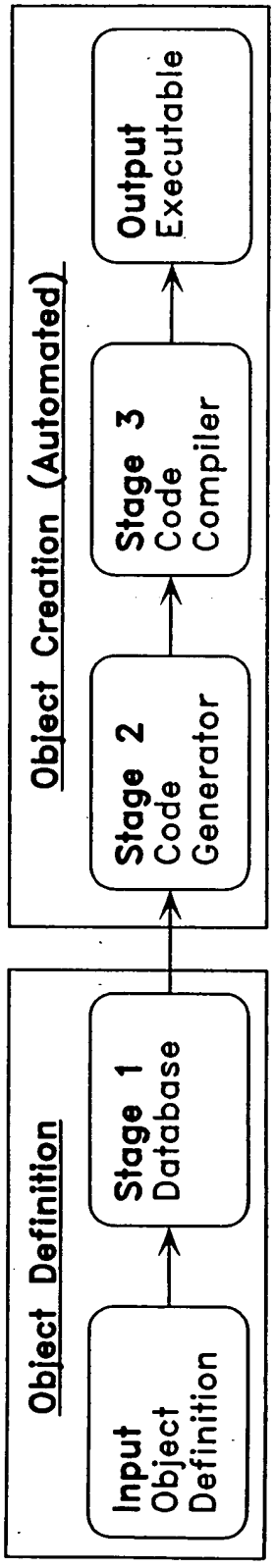

Object Definition
Input Object Definition
Stage 1 Database
Object Creation (Automated)
Stage 2 Code Generator
Stage 3 Code Compiler
Output Executable

Fig. 14

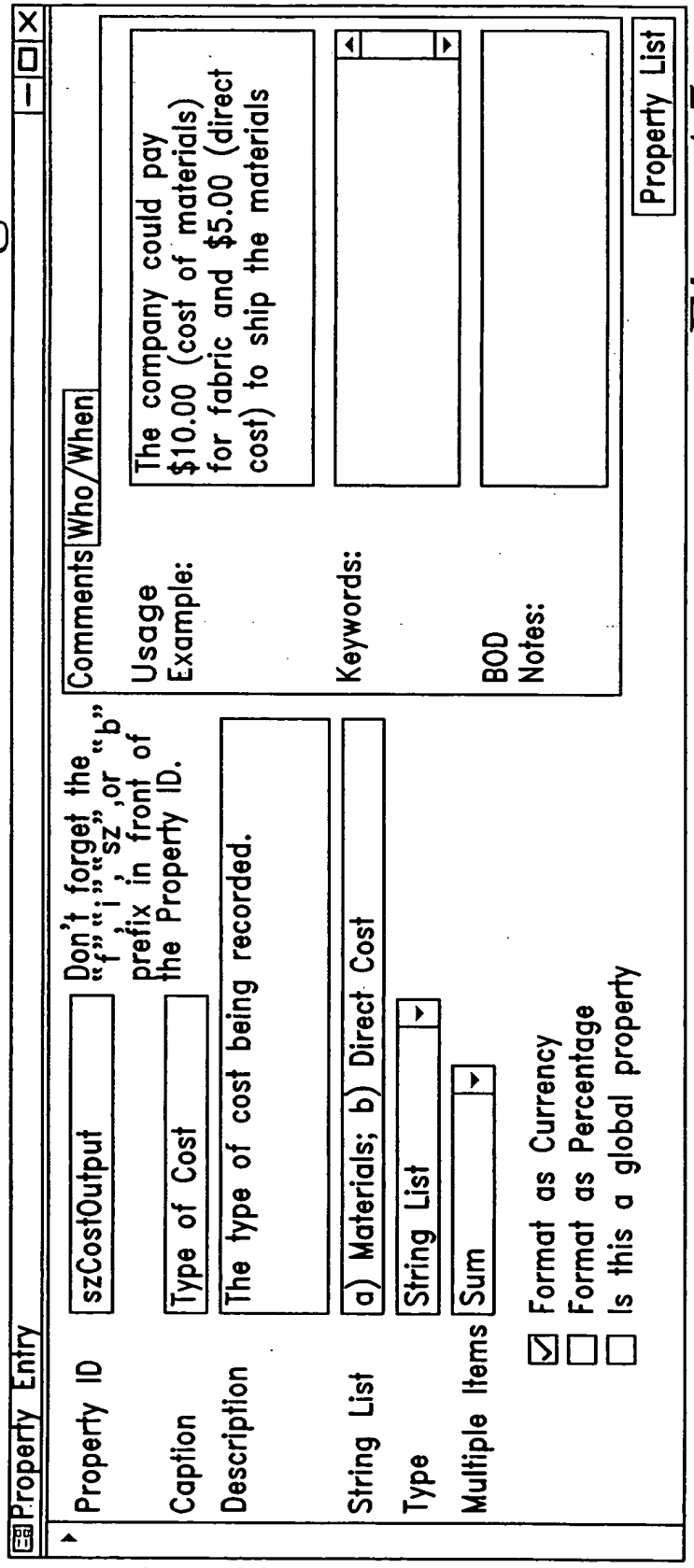

Property Entry
Property ID
szCostOutput
Don't forget the "f" "i" "sz" or "b" prefix in front of the Property ID.
Caption
Type of Cost
Description
The type of cost being recorded.
String List
a) Materials; b) Direct Cost
Type
String List
Multiple Items
Sum
Format as Currency
Format as Percentage
Is this a global property
Comments
Who/When
Usage Example:
The company could pay $10.00 (cost of materials) for fabric and $5.00 (direct cost) to ship the materials
Keywords:
BOD Notes:
Property List

Fig. 15

PPROVED | O.G. FIG.
BY | CLASS | SUBCLASS
RAFTSMAN

Title: TIME-BASED MODELING
Inventor: Jonathan M. FRIEDMAN and Flynn D. FRIEDMAN
Application No.: 09/182,101
Docket No.: 410862000100

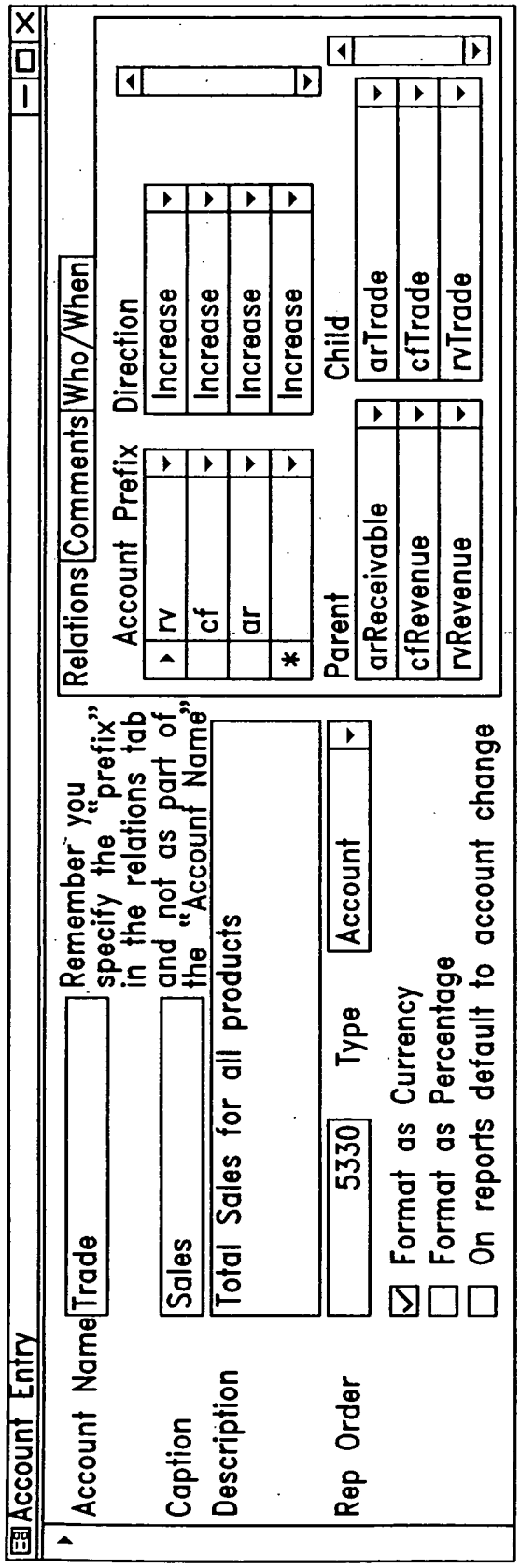


Fig. 16

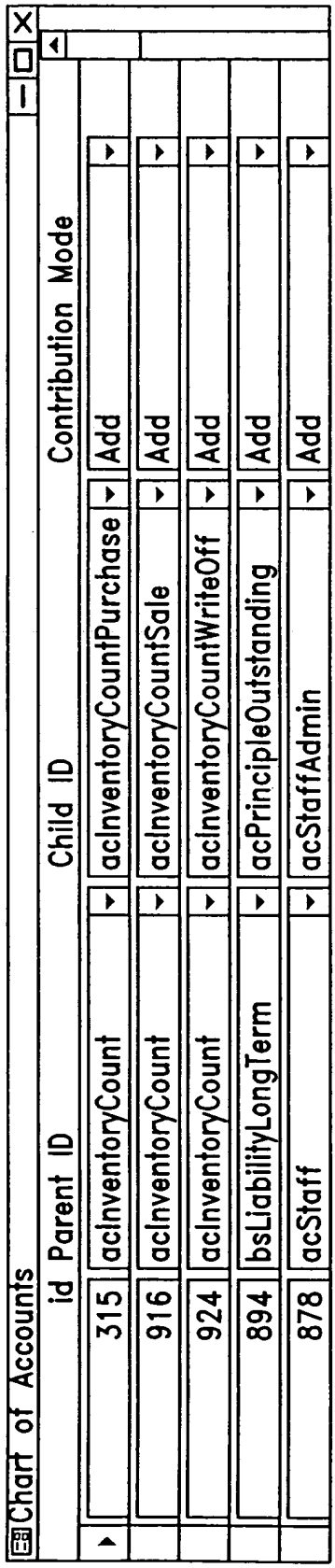


Fig. 17

APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

Title: ME-BASED MODELING
Inventor: Jonathan M. FRIEDMAN and Flynn D. FISHMAN
Application No.: 09/182,101
Docket No.: 410862000100

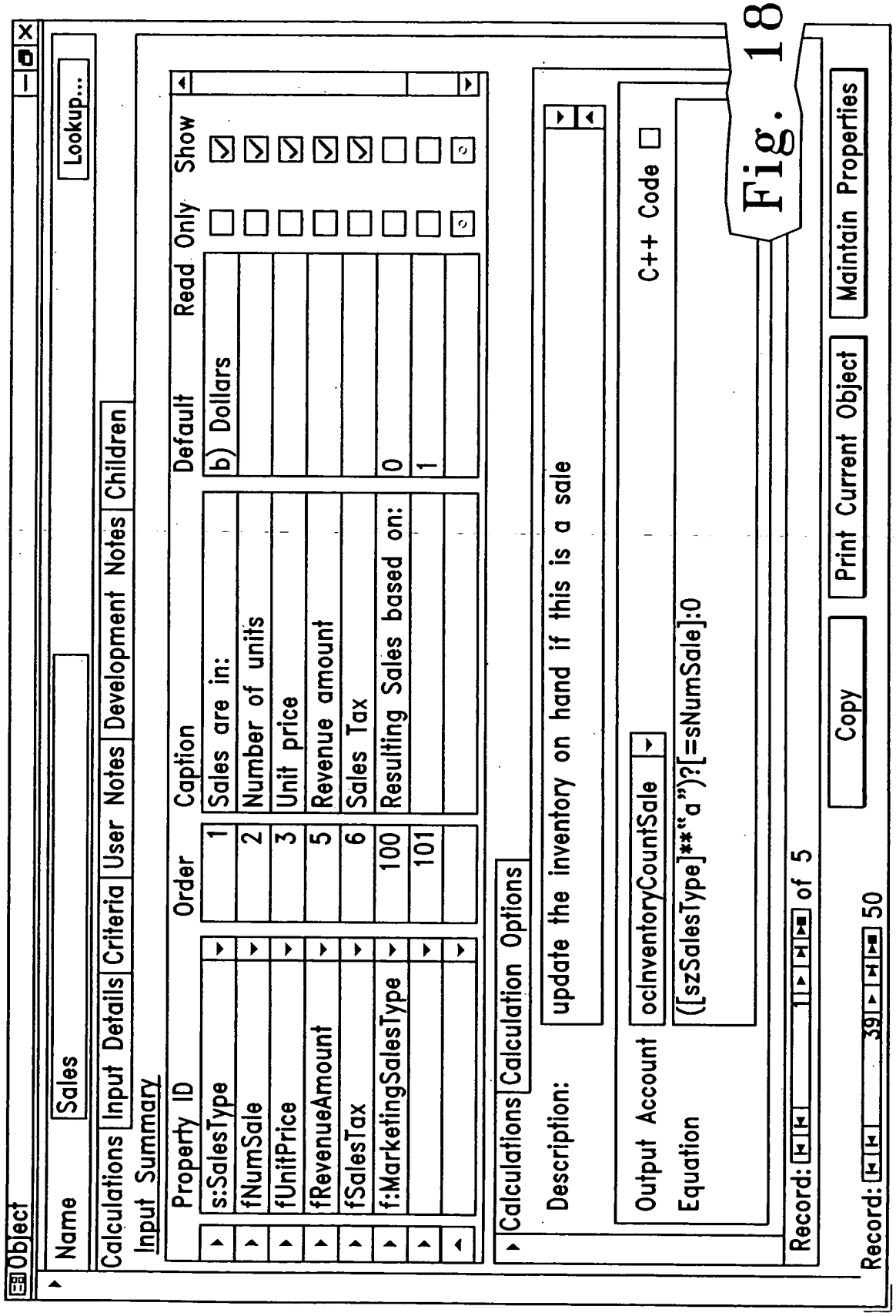


Fig. 18

APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

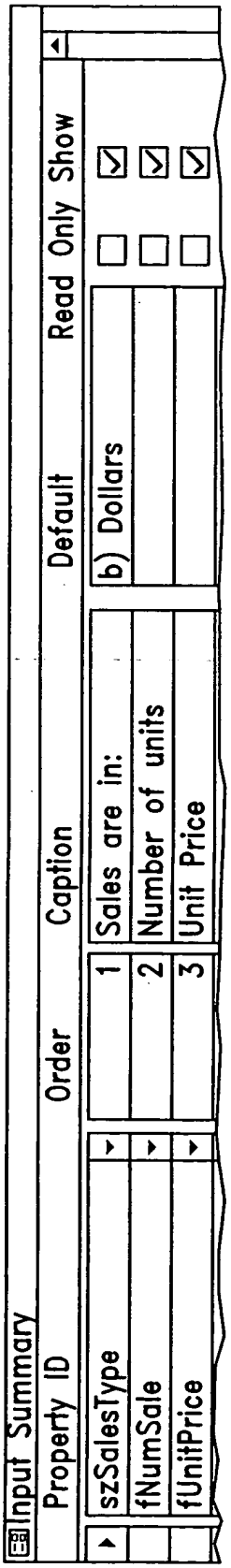


Fig. 18A

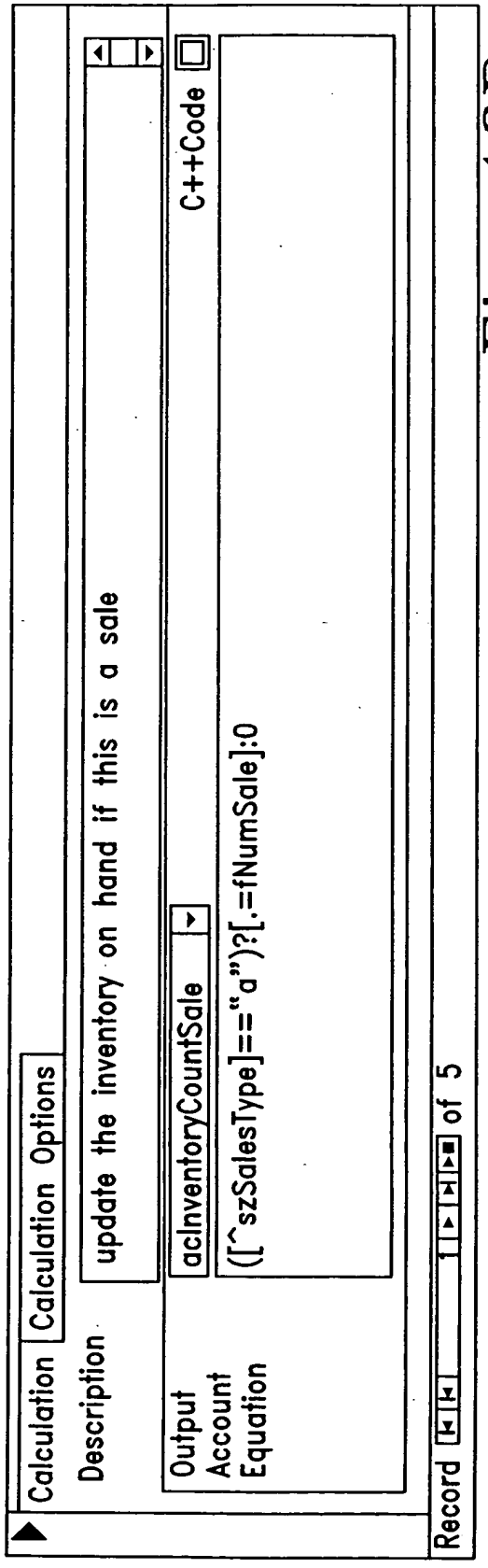


Fig. 18B

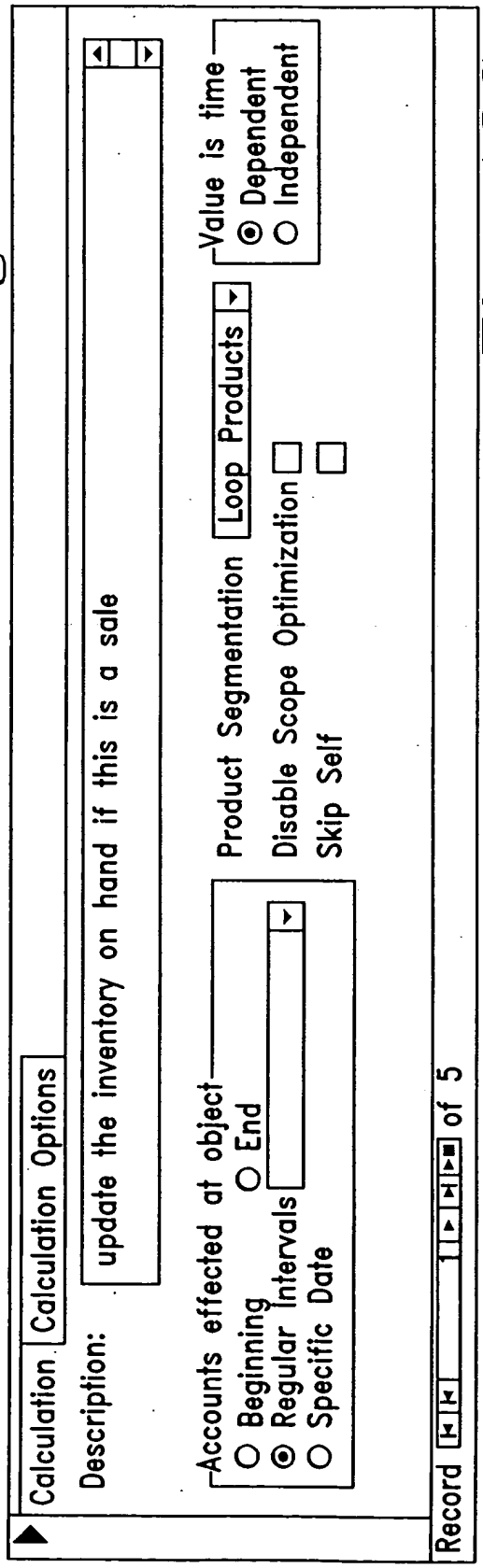
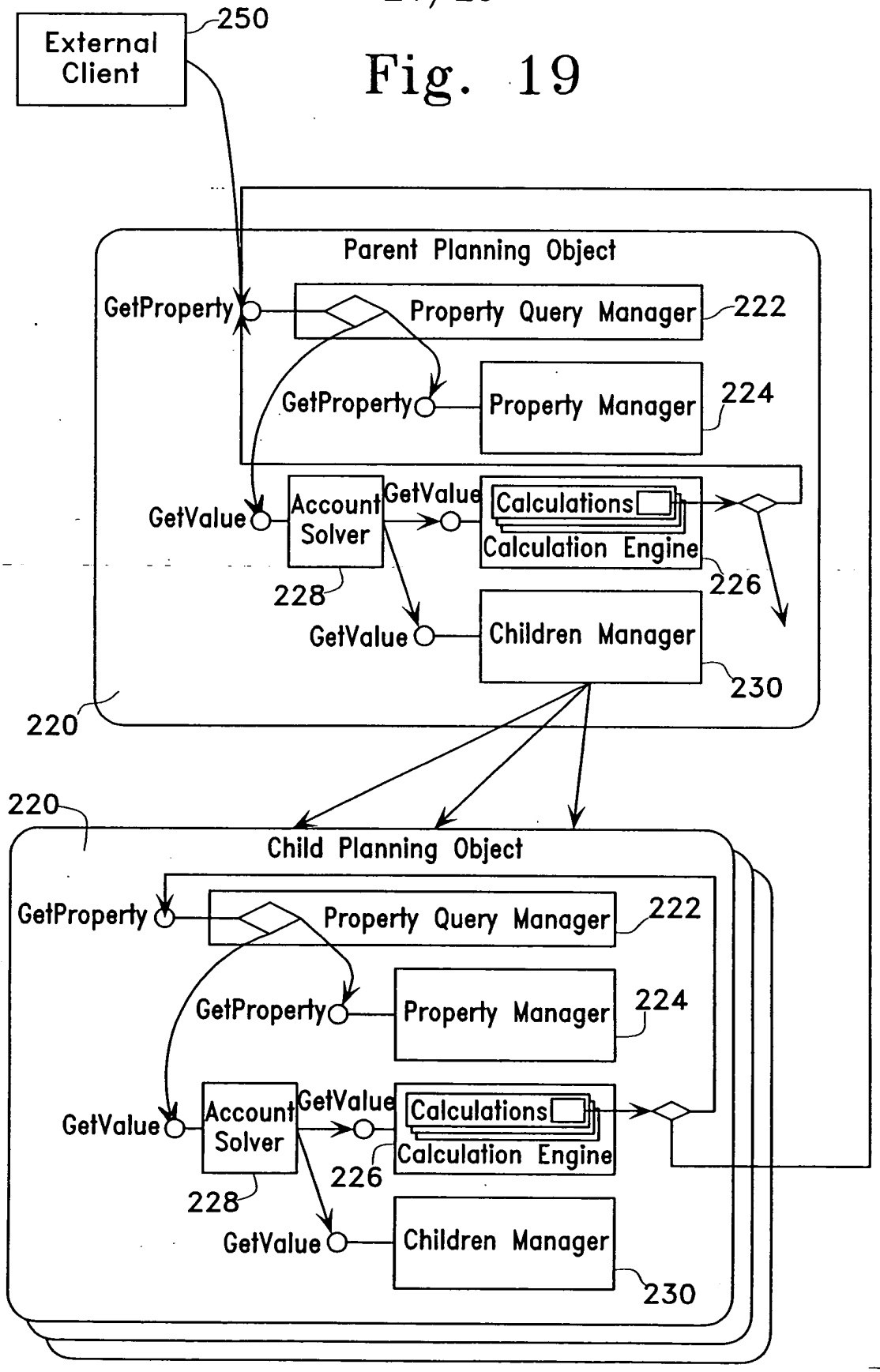


Fig. 18C

APPROVED O.G. FIG.
BY CLASS SUBCLASS
DRAFTSMAN

Fig. 19



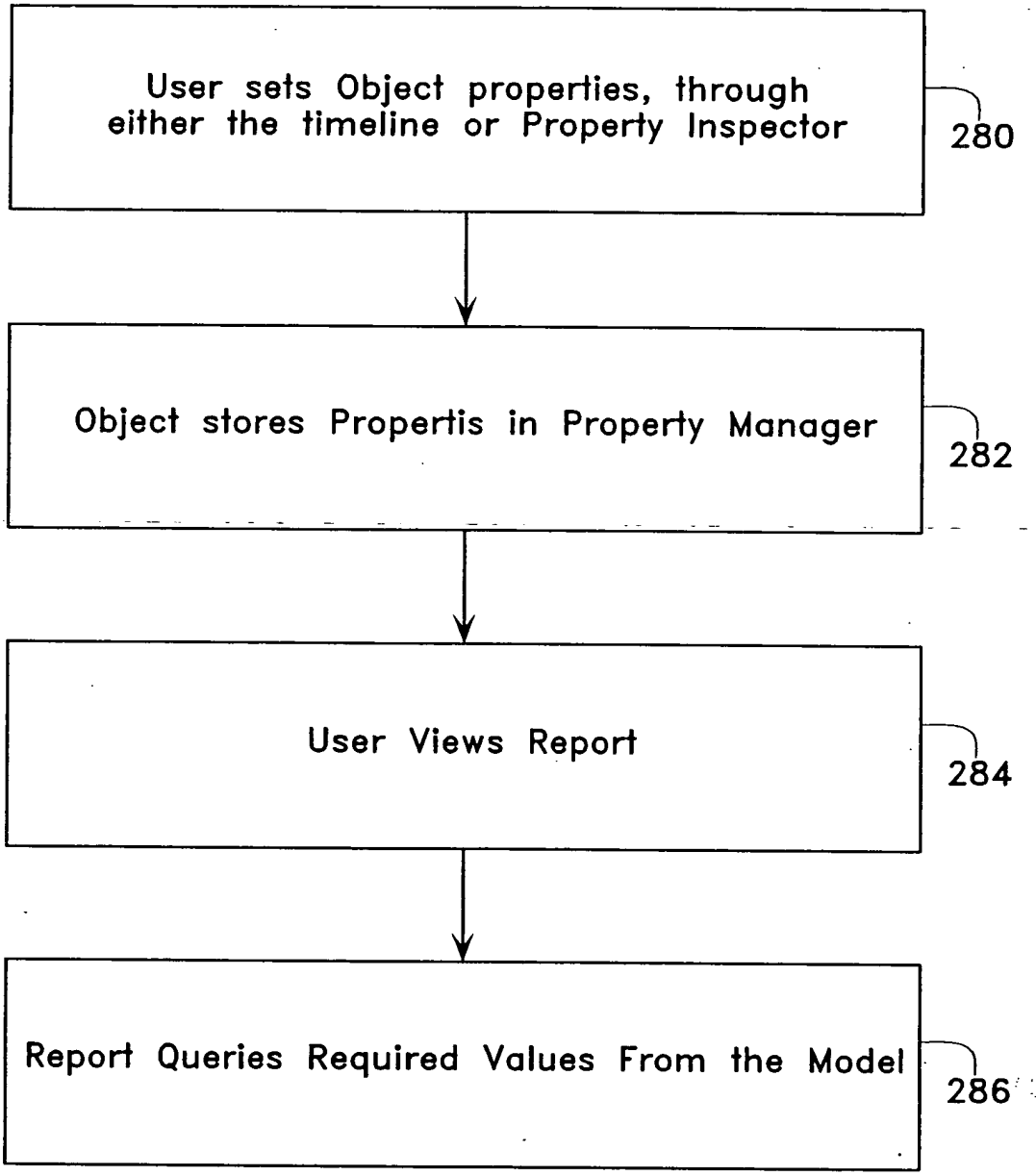

User sets Object properties, through either the timeline or Property Inspector
280
Object stores Propertis in Property Manager
282
User Views Report
284
Report Queries Required Values From the Model
286

Fig. 20

APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

Fig. 21

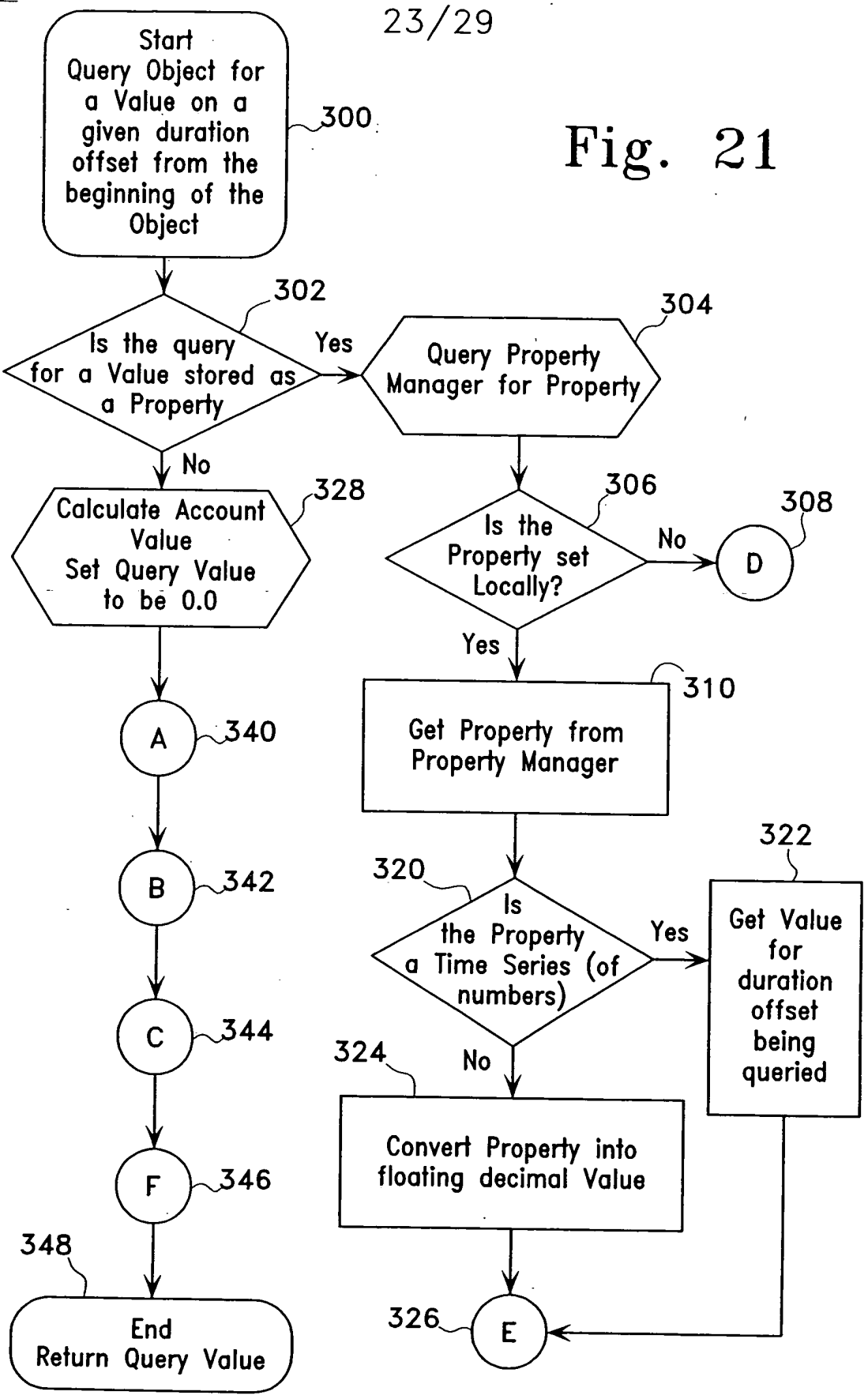


Fig. 21A

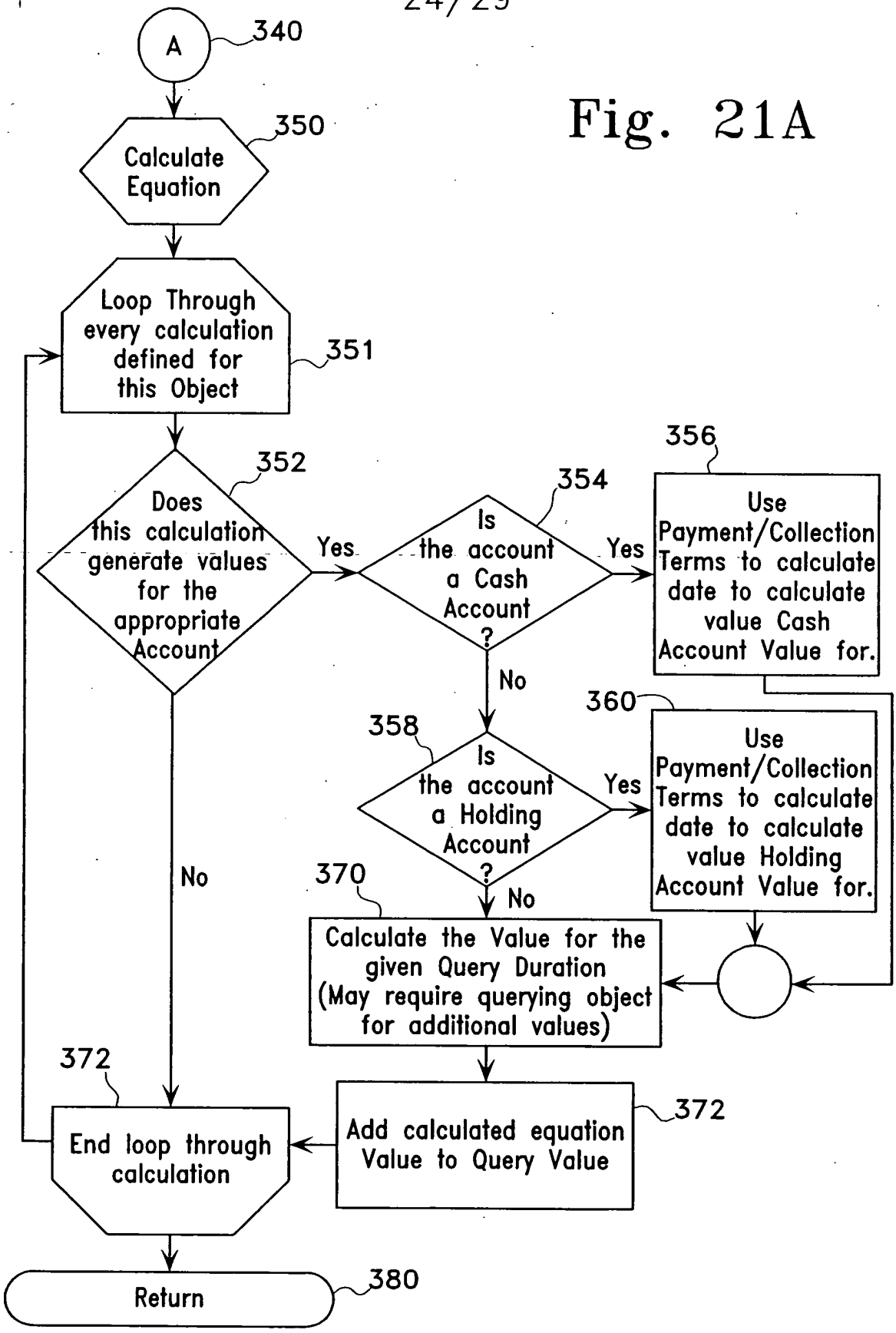

A
340
Calculate Equation
350
Loop Through every calculation defined for this Object
351
Does this calculation generate values for the appropriate Account
352
Yes
Is the account a Cash Account ?
354
Yes
Use Payment/Collection Terms to calculate date to calculate value Cash Account Value for.
356
No
Is the account a Holding Account ?
358
Yes
Use Payment/Collection Terms to calculate date to calculate value Holding Account Value for.
360
No
Calculate the Value for the given Query Duration (May require querying object for additional values)
370
No
Add calculated equation Value to Query Value
372
End loop through calculation
372
Return
380

Fig. 21B

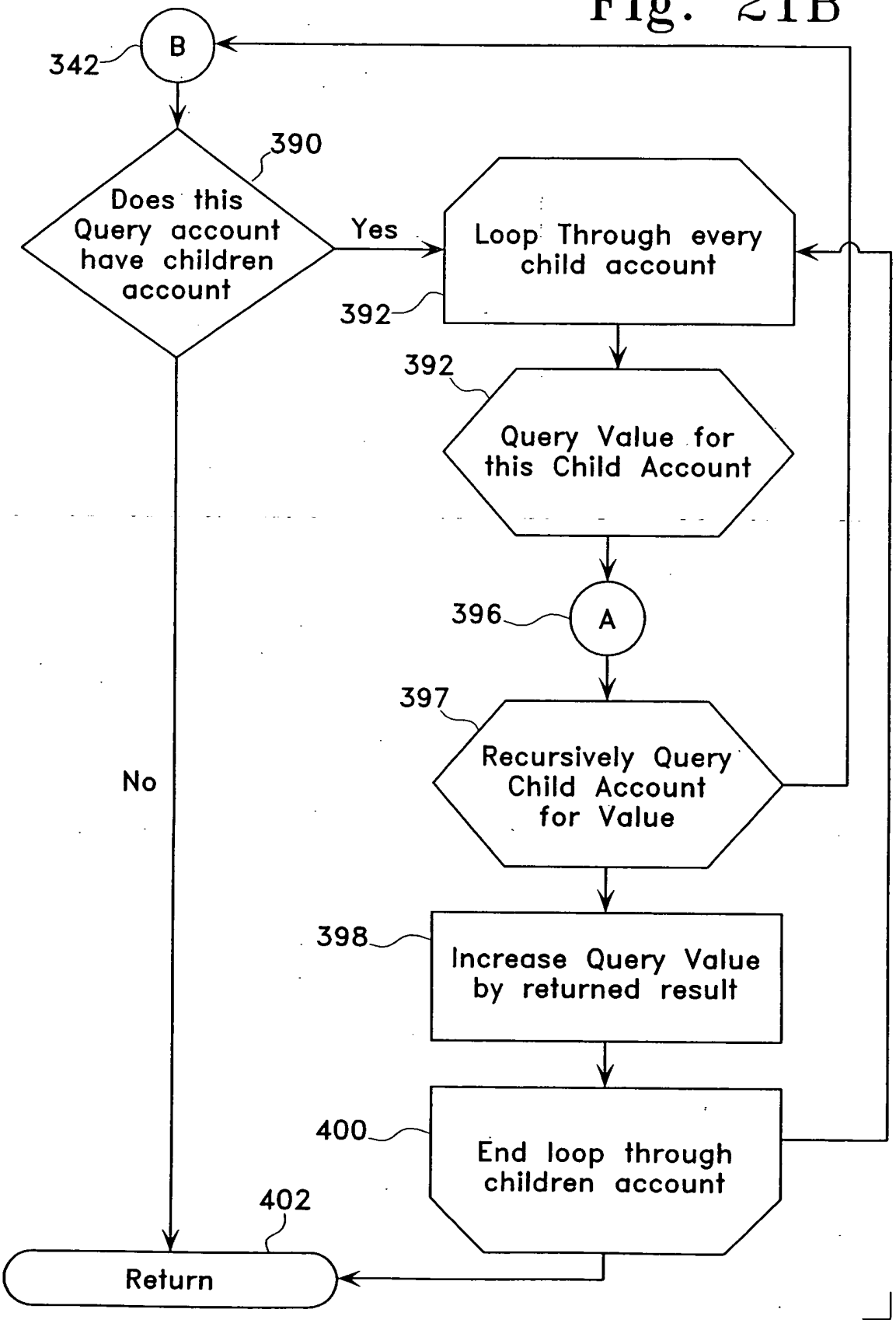
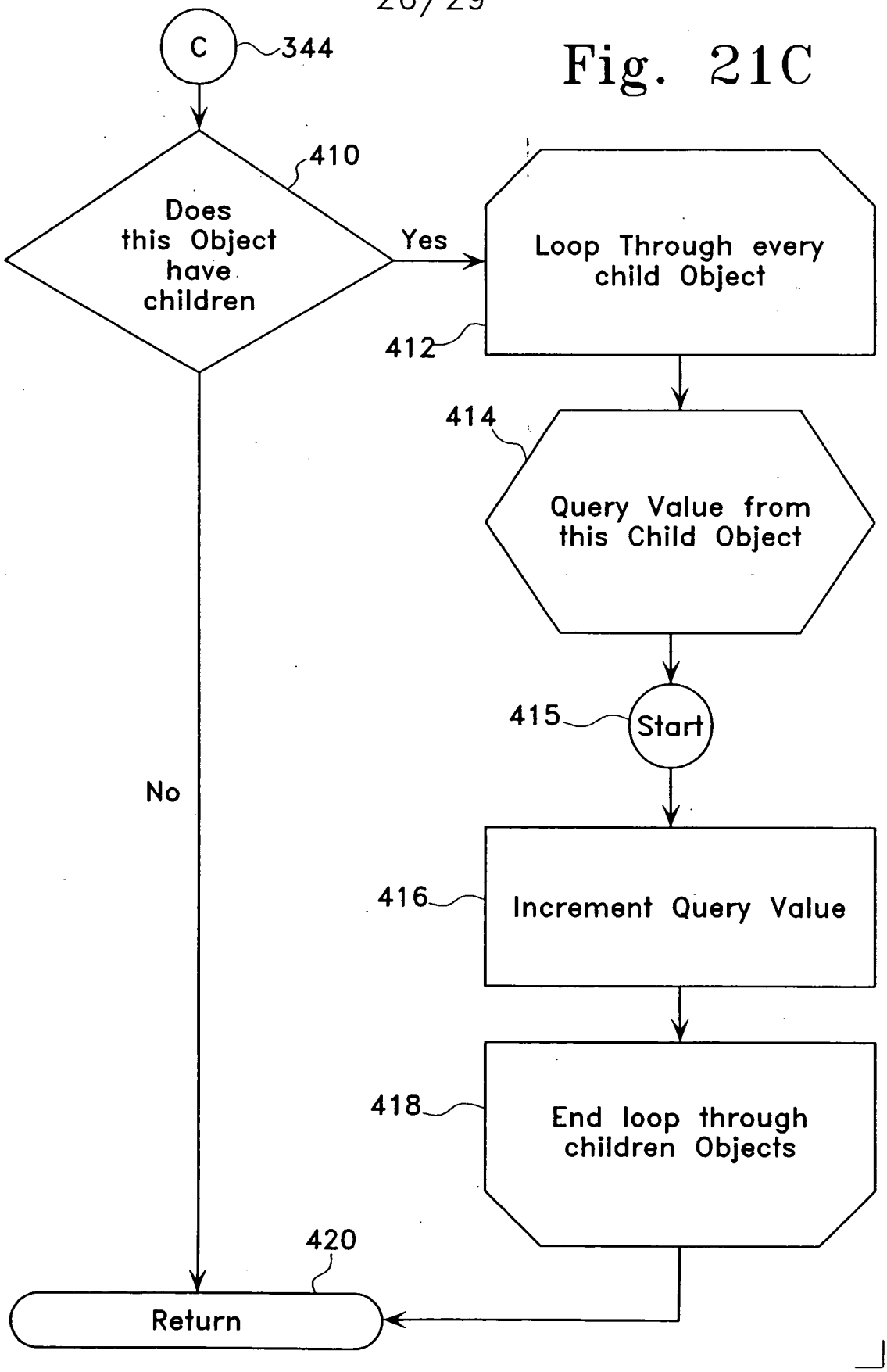

342
B
390
Does this Query account have children account
Yes
Loop Through every child account
392
392
Query Value for this Child Account
396
A
397
Recursively Query Child Account for Value
No
398
Increase Query Value by returned result
400
End loop through children account
402
Return

Fig. 21C


C
344
410
Does this Object have children
Yes
Loop Through every child Object
412
414
Query Value from this Child Object
415
Start
No
416
Increment Query Value
418
End loop through children Objects
420
Return

APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

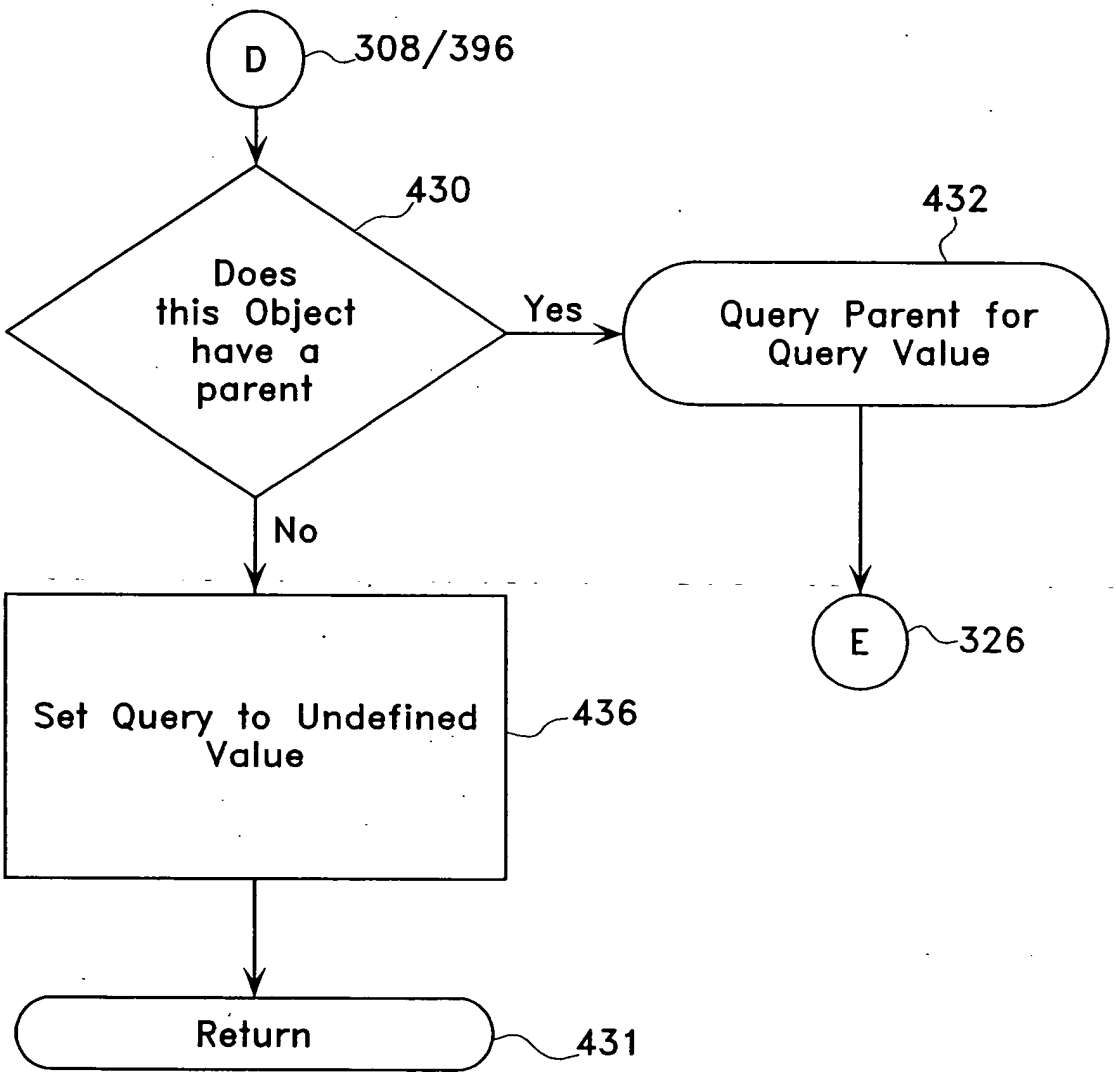
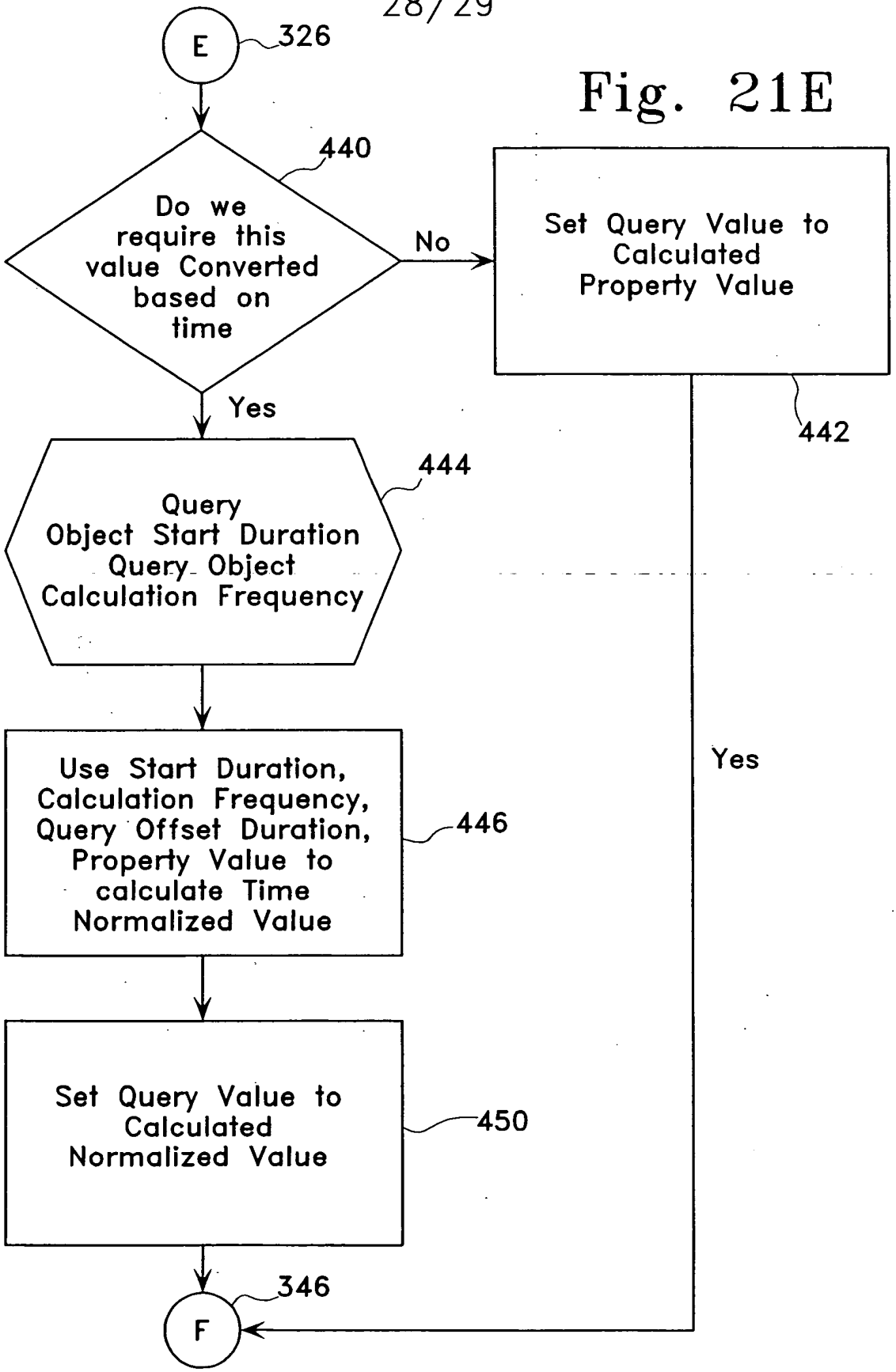


Fig. 21D

Fig. 21E


E
326
440
Do we require this value Converted based on time
No
Set Query Value to Calculated Property Value
442
Yes
444
Query Object Start Duration Query Object Calculation Frequency
Use Start Duration, Calculation Frequency, Query Offset Duration, Property Value to calculate Time Normalized Value
446
Set Query Value to Calculated Normalized Value
450
Yes
346
F

APPROVED BY DRAFTSMAN | O.G. FIG. | CLASS | SUBCLASS

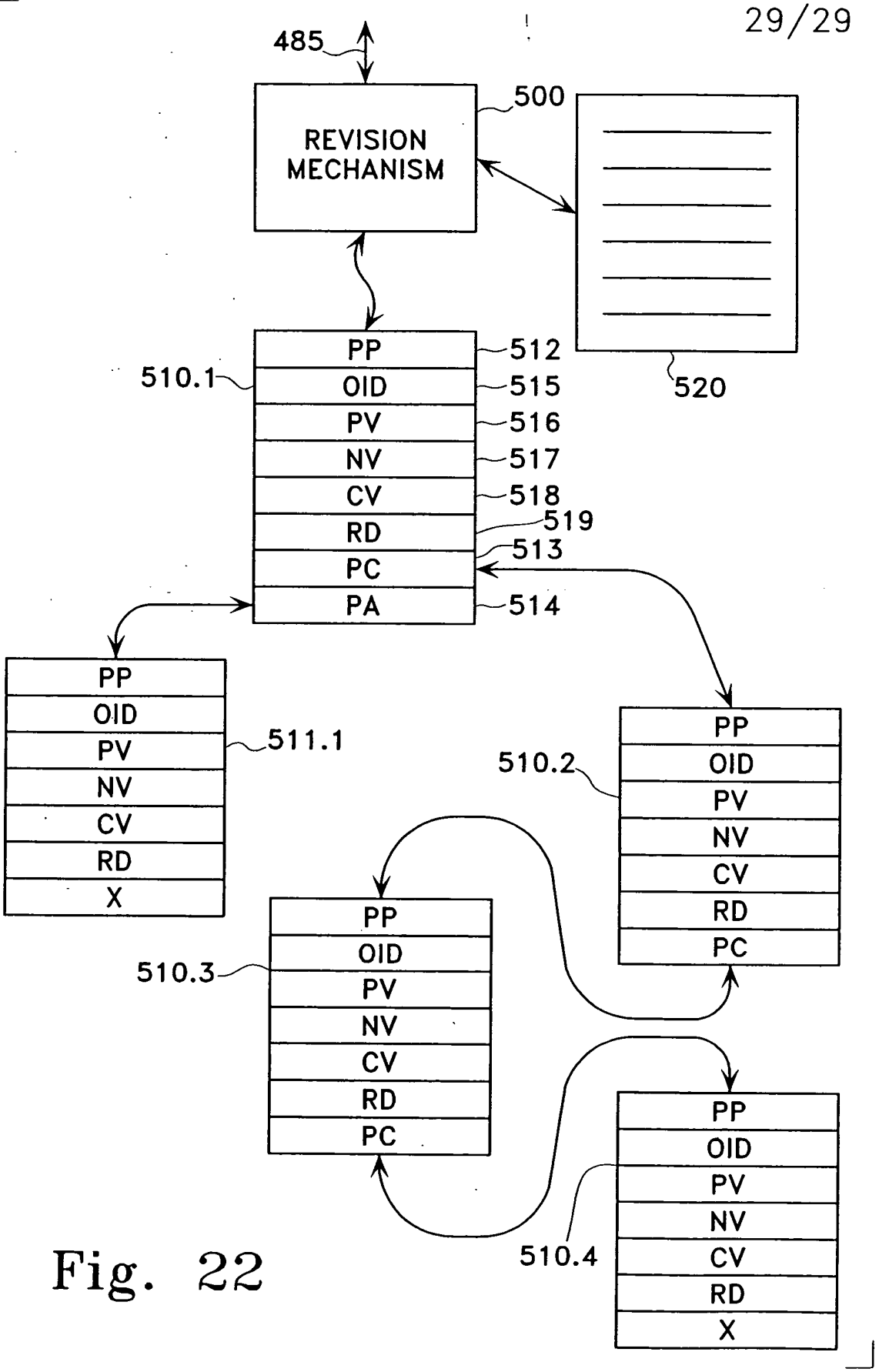


Fig. 22